

BASIC RATES



BASIC RATES
0.1 HIRE CHARGES OF PLANTS

Code No.	Description	Unit	Rate
0101	Carriage of concrete by transit mixer.	km/ cum	₹ 32.00
0102	Concrete joint cutting machine.	per day	₹ 981.00
0103	Front end loader	per day	₹ 963.00
0104	Generator 250 KVA.	per day	₹ 1,278.00
0105	Hand Grinder For mirror polish	per day	₹ 275.00
0106	Hire and running charges of bentonite pump.	per day	₹ 4,200.00
0107	Hire and running charges of crane 20 tonne capacity.	per day	₹ 10,091.00
0108	Hire and running charges of hydraulic piling rig with power unit etc.including complete accessories and shifting at site.	per day	₹ 34,000.00
0109	Hire and running charges of light crane.	per day	₹ 2,484.00
0110	Hire and running charges of loader.	per day	₹ 5,250.00
0111	Hire and running charges of tipper	per day	₹ 2,250.00
0112	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories.	per day	₹ 35,000.00
0113	Hire charges of Concrete Mixer 0.25- 0.40 cubic metre with hopper	per day	₹ 1,350.00
0114	Hire charges of Derrick monkey rope	per day	₹ 864.00
0115	Hire charges of Diesel Road Roller - 8 to 10 tonne	per day	₹ 2,653.00
0116	Hire charges of Diesel Truck - 9 tonne	per day	₹ 2,650.00
0117	Hire charges of Pump set of capacity 4000 litres/hour.	per day	₹ 657.00
0118	Hydraulic Excavator (3D) with driver and fuel.	per day	₹ 1,296.00
0119	Joint cutting machine with 2-3 blades	per day	₹ 1,800.00
0120	Machine for rubbing of floors	per day	₹ 380.00
0121	Mobile crane.	per day	₹ 7,560.00
0122	Paint applicator	per day	₹ 1,450.00
0123	Pin vibrator	per day	₹ 382.00
0124	Production cost of concrete by batch mix plant.	cum	₹ 450.00
0125	Pumping charges of concrete including Hire charges of pump,piping work & accessories etc.	cum	₹ 175.00
0126	Surface Vibrator	per day	₹ 436.00
0127	Tractor with ripper attachment.	per day	₹ 1,472.00
0128	Tractor with trolley.	per day	₹ 1,744.00
0129	Vibrator (Needle type 40mm)	per day	₹ 436.00
0130	Water tanker 5 - 6 kl	per hour	₹ 310.00

Code No.	Description	Unit	Rate
0131	Hire and running charges of Tripod and Mechanical Winch machine complete with power unit and accessories	per day	₹ 2,200.00
0132	Hire and running charges of drill machine up to 400 mm dia (including cost of mobile oil, diesel consumption in ordinary soil and operator)	per day	₹ 7,900.00
0133	Pile Integrity testing equipment	per day	₹ 3,200.00
0134	Hire Charges of Suction Jetting machine 2200 PSI machine i/c POL and operator	per day	₹ 37,000.00
0135	Hire charges of Spraying machine including electric charges	per day	₹ 285.00
0136	Air compressor	per hour	₹ 230.00
0137	Using cost of Ultra Violet Radiation tube	per hour	₹ 230.00
0139	Compressor, gun, rubber pipes & other accessories-hire charge of plant & machinery i/c necessary fuel	per day	₹ 5,000.00
0140	Hire charges of Drill machine upto 30 mm dia	per day	₹ 185.00
0141	Hire charges of sand blasting equipment	per day	₹ 500.00
0142	Hire charges of compressor	per day	₹ 750.00
0143	Welding charges of shear key to existing reinforcement	each	₹ 2.50
0144	Hire charges of plant and Machinery that can inject 350 kg/day	per day	₹ 125.00

Notes:- Above hire charges include cost of services of operating staff and supply of lubricating oil.

Basic Rates
0.2 LABOUR

Note :- These rates are exclusive of contractor's profit and over heads and are inclusive of wages for weekly day of rest

Code No.	Description	Unit	Rate
0201	Bandhani	Day	₹ 300.00
0202	Bar bender	Day	₹ 300.00
0203	Beldar	Day	₹ 300.00
0204	Beldar - Skilled	Day	₹ 340.00
0205	Bhisti/ Waterman	Day	₹ 300.00
0206	Blacksmith 1st class	Day	₹ 425.00
0207	Blacksmith 2nd class	Day	₹ 380.00
0208*	Carpenter (average)	Day	₹ 400.00
0209	Carpenter 1st class	Day	₹ 425.00
0210	Carpenter 2nd class	Day	₹ 380.00
0211	Chowkidar	Day	₹ 300.00
0212	Coolie/Helper	Day	₹ 300.00
0213	Driver (for Road Roller, Concrete Mixer, Truck etc.)	Day	₹ 425.00
0214	Fitter (2nd class)	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0216	Foreman	Day	₹ 425.00
0217	Glazier	Day	₹ 380.00
0218*	Mason (average)	Day	₹ 400.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0221	Mason (for ornamental stone work) 1st class	Day	₹ 425.00
0222	Mason (for plain stone work) 2nd class	Day	₹ 380.00
0223	Mason (for plaster of paris work) 1st class	Day	₹ 425.00
0224	Mate	Day	₹ 300.00
0225	Mistry	Day	₹ 380.00
0226	Operator (Pile/ Special machine)	Day	₹ 425.00
0227	Painter	Day	₹ 340.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	₹ 380.00
0229	Skilled torch operator for laying tack	Day	₹ 425.00
0230	Sprayer (for bitumen, tar etc.)	Day	₹ 340.00
0231	Thatcher	Day	₹ 300.00
0232	White Washer	Day	₹ 340.00
0233	Technician	Day	₹ 700.00
0234	Sewerman	Day	₹ 340.00
0235	Nozzleman/ Gunman	Day	₹ 425.00
0236	Pump operator	Day	₹ 425.00
0237	Helper (Technician)	Day	₹ 340.00

Note :- * These rates are average of 1st class and 2nd class categories. This is for use in the analysis of rate only.

Basic Rates
0.3 MATERIALS

Note :- These rates are exclusive of contractor's profit, over heads and carriage but include octroi, royalty, sales tax (VAT) etc.

Code No.	Description	Unit	Rate
01001	Diesel	litre	₹ 54.27
01002	Mobil Oil	litre	₹ 250.00
02001	Chlorpyriphos 20% E.C. / Lindane 20% E.C.	litre	₹ 250.00
02002	Sand (fine) : Local quarry	cum	₹ 300.00
02003	Sand (fine) : Selected quarry	cum	₹ 370.00
02004	Kerosene oil	litre	₹ 48.00
03001	Cement (portland)	tonne	₹ 6,100.00
03002	Cement (white)	tonne	₹ 18,000.00
03003	Marble chips large size above 4 mm White & black	quintal	₹ 541.00
03004	Marble chips up to 4mm and downsize White & black	quintal	₹ 541.00
03005	Marble dust/ powder	cum	₹ 3,780.00
03006	Mud (dry)	cum	₹ 28.00
03007	Stone dust	cum	₹ 2,600.00
04001	Brick Aggregate (Single size) : 40 mm nominal size	cum	₹ 2,550.00
04002	Brick Aggregate (Single size) : 20 mm nominal size	cum	₹ 2,975.00
04003	Brick Aggregate (Single size) : 12 mm nominal size	cum	₹ 3,075.00
04004	Stone Aggregate (Single size) : 40 mm nominal size	cum	₹ 3,532.00
04005	Stone Aggregate (Single size) : 25 mm nominal size	cum	₹ 3,969.00
04006	Stone Aggregate (Single size) : 20 mm nominal size	cum	₹ 3,969.00
04007	Stone Aggregate (Single size) : 12 mm nominal size	cum	₹ 4,005.00
04008	Stone Aggregate (Single size) : 10 mm nominal size	cum	₹ 4,040.00
04009	Stone Aggregate (Single size) : 06 mm nominal size	cum	₹ 3,750.00
04010	Local ballies 100/125 mm diameter	metre	₹ 59.00
04011	Paving bitumen S-90 of approved quality	tonne	₹ 36,820.00
04012	Coal (steam)	quintal	₹ 890.00
04013	Second class local wood in scantling	10 cudm	₹ 137.00
04014	Second class local wood in planks	10 cudm	₹ 145.00
04015	Water proofing materials	kilogram	₹ 36.00
04016	Double clip (bridge clip)	each	₹ 119.00
04017	Single clip	each	₹ 97.00
04018	M.S. tube 40 mm dia	metre	₹ 328.00
04019	M.S. tube 50 mm dia	metre	₹ 379.00
04020	Column clamp 450x1070 m	each	₹ 1,628.00
05001	12 mm dia steel pegs	quintal	₹ 5,050.00
05002	Adjustable span ESO+SI (2.35-3.40)	each	₹ 2,327.00
05003	Adjustable telescopic prop 3 m (2.02-3.75 m)	each	₹ 1,452.00
05004	Binding wire	kilogram	₹ 58.00
05005	Bitumen solution primer of approved quality	litre	₹ 52.00

Code No.	Description	Unit	Rate
05006	Bitumen [Blown type petroleum] of penetration 85/25 of approved quality	tonne	₹ 36,820.00
05008	Bolts and nuts 16 mm dia 65 mm long	each	₹ 13.00
05009	Bolts and nuts 20 mm dia 65 mm long	each	₹ 19.00
05010	Bolts and nuts 20 mm dia 70 mm long	each	₹ 19.00
05011	Bolts and nuts 20 mm dia 75 mm long	each	₹ 19.00
05012	Bolts and nuts 20 mm dia 80 mm long	each	₹ 20.00
05013	Bolts and nuts 24 mm dia 85 mm long	each	₹ 38.00
05014	Bolts and nuts 24 mm dia 90 mm long	each	₹ 40.00
05015	Bolts and nuts 27 mm dia 100 mm long	each	₹ 47.00
05016	Bolts and nuts above 300 mm in length	quintal	₹ 5,350.00
05017	Bolts and nuts up to 300 mm in length	quintal	₹ 5,200.00
05018	Cement Concrete Jali 25 mm thick	sqm	₹ 234.00
05019	Cement Concrete Jali 40 mm thick	sqm	₹ 318.00
05020	Cement Concrete Jali 50 mm thick	sqm	₹ 373.00
05021	Copper plate	kilogram	₹ 322.00
05022	Corner angle 45x45x5 m 2.50 m long	each	₹ 400.00
05023	Double coupler	each	₹ 73.00
05024	Flame retardant face insulating, Impregnated fibre board 12 mm thick	sqm	₹ 415.00
05026	Flats up to 10 mm in thickness	quintal	₹ 3,992.00
05027	Galvanised steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	₹ 12.00
05028	Galvanised steel bolts & nuts 10 mm dia and 27 cm long both sides threaded with 4 galvanised steel nuts	each	₹ 22.00
05030	Galvanised steel bolts 10 mm dia and 7 cm long with nuts	each	₹ 14.00
05031	Hard drawn steel wire	quintal	₹ 5,268.00
05032	Hard drawn steel wire fabric	sqm	₹ 535.00
05033	Hessian cloth	sqm	₹ 28.00
05034	Mild steel expanded metal 20x60 mm strands	sqm	₹ 314.00
05038	Mild steel round bar 12 mm dia and below	quintal	₹ 4,055.00
05039	Mild steel round bar above 12 mm dia	quintal	₹ 4,010.00
05040	Average rate of Mild steel round bars for reinforcements	quintal	₹ 4,032.00
05041	Mild steel sheets for tanks	quintal	₹ 4,532.00
05042	Mild steel square bars	quintal	₹ 4,140.00
05043	Mild stel bolts 6 mm dia and 25 mm long with hexagonal head	10 Nos	₹ 27.00
05044	Non - Asbestos multi purpose fibre cement board 6mm thick.	sqm	₹ 225.00
05045	Plastic cone 12 mm dia	each	₹ 18.00
05046	Plasticizer / super plasticizer	kilogram	₹ 41.00
05047	Ply wood 5 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	₹ 722.00
05048	Prop 2 m (2-3.5m)	each	₹ 1,155.00
05049	Prop 4 m	each	₹ 1,584.00
05050	Rawl plug 50 mm (designation 10 no.)	each	₹ 7.00
05051	Spring coil 12 mm	each	₹ 15.00
05052	Stirrup head	each	₹ 495.00
05053	Straining bolts	each	₹ 79.00
05054	Strips Aluminium fluted 3.15mm thick and 200mm wide metre	Metre	₹ 347.00
05055	Strips-Aluminium fluted 3.15mm thick and 150mm wide	metre	₹ 245.00

Code No.	Description	Unit	Rate
05056	Structural steel such as tees, angles channels and R.S. joists	quintal	₹ 4,267.00
05057	Tie bolt 12 mm dia 100 mm length	each	₹ 52.00
05058	Tie bolt 12 mm dia 150 mm length	each	₹ 69.00
05059	Tie bolt 12 mm dia 450 mm length	each	₹ 155.00
05060	Tie bolt 20 mm dia 150 mm length	each	₹ 98.00
05061	Tie bolt 20 mm dia 225 mm length	each	₹ 121.00
05062	Twisted steel / deformed bars	quintal	₹ 4,102.00
05063	Wall form panel 1250x450 mm	each	₹ 1,560.00
05064	Wall form panel 1250x500 mm	each	₹ 1,698.00
05065	Water proof ply 12mm thick.	sqm	₹ 702.00
05066	Wire nails	kilogram	₹ 66.00
05067	1 mm thick Stainless steel cover plate grade 304	kg	₹ 300.00
05068	Coupler 16 mm dia	each	₹ 75.00
05069	Coupler 20 mm dia	each	₹ 98.00
05070	Coupler 25 mm dia	each	₹ 145.00
05071	Coupler 28 mm dia	each	₹ 215.00
05072	Coupler 32 mm dia	each	₹ 258.00
06001	Brick (1st class)	1000 Nos	₹ 8,027.00
06002	Brick (2nd class)	1000 Nos	₹ 6,690.00
06003	Bitumen felt :Type 3 grade 1	Sqm	₹ 70.00
06004	Gypsum panel 666 X 500 X 100 mm size.	Sqm	₹ 800.00
06005	Bonding plaster for Gypsum panel.	Kg	₹ 78.00
06006	Cement Concrete Soild Blocks	1000 Nos	₹ 10,000.00
07001	8 mm thick granite stone tiles (mirror polished of all shades)	Sqm	₹ 825.00
07002	Granite of any colour, 18 mm thick slab, above 0.50 sqm (areawise)	Sqm	₹ 2,050.00
07003	Granite of any colour, 18 mm thick slab, upto 0.50 sqm (areawise)	Sqm	₹ 2,000.00
07004	Gun metal cramp	kg	₹ 350.00
07005	Raj nagar plain white marble (table rubbed and polished) 18 mm thick above 0.50 sqm	Sqm	₹ 950.00
07006	Raj nagar plain white marble (table rubbed and polished) 18 mm thick upto 0.50 sqm	Sqm	₹ 850.00
07007	Stainless steel cramp	kg	₹ 330.00
07008	Table rubbed polished stone 18 mm thick (75x50cm) Agaria Marble stone - 18 mm thick	Sqm	₹ 1,950.00
07009	Table rubbed polished stone 18mm thick (75x50cm) Granite stone - 18mm thick	Sqm	₹ 1,950.00
07010	Wedge expansion hold fastener 1/2" or 12 mm	Each	₹ 31.00
07011	Wedge expansion hold fastener 1/4" or 6 mm	Each	₹ 14.00
07012	Wedge expansion hold fastener 3/8" or 10 mm	Each	₹ 16.00
07013	Raj nagar plain white marble (table rubbed and polished) 14 mm thick upto 0.50 sqm	Sqm	₹ 600.00
07014	Raj nagar plain white marble (table rubbed and polished) 14 mm thick above 0.50 sqm	Sqm	₹ 700.00
07015	Granite of any colour, 14 mm thick slab, upto 0.50 sqm (areawise)	Sqm	₹ 1,700.00
07016	Granite of any colour, 14 mm thick slab, above 0.50 sqm (areawise)	Sqm	₹ 1,750.00
07017	Table rubbed polished stone 14 mm thick (75x50cm) Agaria Marble stone - 14 mm thick	Sqm	₹ 1,550.00
07018	Table rubbed polished stone 14mm thick (75x50cm) Granite stone - 14mm thick	Sqm	₹ 1,550.00

Code No.	Description	Unit	Rate
07019	18 mm thick Italian Marble stone slab, Perlato (slab area up to 0.5 sqm)	Sqm	₹ 3,450.00
07020	18 mm thick Flamed finish granite stone slab	Sqm	₹ 1,950.00
08001	Non - Asbestos multi purpose fibre cement board 8mm thick.	sqm	₹ 313.00
08002	Flat pressed 3 layer particle board (medium density) Grade I :12 mm thick	sqm	₹ 364.00
08003	Extra for veneered particle board with : Teak veneering on one side and commercial veneered on other side	sqm	₹ 292.00
08004	Extra for veneered particle board with : Commercial veneering on both sides	sqm	₹ 185.00
08005	Extra for veneered particle board with : Teak veneering on both sides	sqm	₹ 520.00
08006	Brass butt hinges (light/ordinary type) : 125x70x4 mm	10 Nos	₹ 870.00
08007	Brass butt hinges (light/ordinary type) : 100x70x4 mm	10 Nos	₹ 725.00
08008	Brass butt hinges (light/ordinary type) : 75x40x2.5 mm	10 Nos	₹ 455.00
08009	Brass butt hinges (light/ordinary type) : 50x40x2.5 mm	10 Nos	₹ 208.00
08010	Brass butt hinges (heavy type) : 125x85x5.5 mm(.70)kg	10 Nos	₹ 3,368.00
08011	Brass butt hinges (heavy type) : 100x85x5.5 mm(.56)kg	10 Nos	₹ 2,885.00
08012	Brass butt hinges (heavy type) :75x65x4.0 mm(.20)kg	10 Nos	₹ 1,045.00
08013	Brass parliamentary hinges 150x125x27x5 mm	10 Nos	₹ 3,010.00
08014	Brass parliamentary hinges 125x125x27x5 mm	10 Nos	₹ 2,685.00
08015	Brass parliamentary hinges 100x125x27x5 mm	10 Nos	₹ 2,475.00
08016	Brass parliamentary hinges 75x100x20x3.2 mm	10 Nos	₹ 1,845.00
08017	Brass tower bolt (barrel type) 250x10 mm	each	₹ 245.00
08018	Brass tower bolt (barrel type) 200x10 mm	each	₹ 195.00
08019	Brass tower bolt (barrel type) 150x10 mm	each	₹ 155.00
08020	Brass tower bolt (barrel type) 100x10 mm	each	₹ 102.00
08021	Brass handles 125 mm with plate 175x32 mm	each	₹ 155.00
08022	Brass handles 100 mm with plate 150x32 mm	each	₹ 143.00
08023	Brass handles 75 mm with plate 125x32 mm	each	₹ 115.00
08024	Brass door latch 300x16x5 mm (0.380 kg)	each	₹ 187.00
08025	Brass door latch 250x16x5 mm (0.350 kg)	each	₹ 178.00
08026	Brass mortice latch and lock 100x65 mm with 6 levers and a pair of lever handles	each	₹ 400.00
08027	Brass mortice latch 100x65mm with a pair of brass lever handles	each	₹ 345.00
08028	Brass casement window fastener	Each	₹ 63.00
08029	Brass casement stays (straight peg type) 300 mm weighing not less than 0.33 kg	each	₹ 148.00
08030	Brass casement stays (straight peg type) 250 mm weighing not less than 0.28 kg	Each	₹ 125.00
08031	Brass casement stays (straight peg type) 200 mm weighing not less than 0.24 kg	each	₹ 115.00
08032	Brass hasps and staples (safety type) 300 mm	10 Nos	₹ 808.00
08033	Brass hasps and staples (safety type) 115 mm	10 Nos	₹ 678.00
08034	Brass hasps and staples (safety type) 90 mm	10 Nos	₹ 575.00

Code No.	Description	Unit	Rate
08035	Brass Night latch	each	₹ 504.00
08036	Brass cupboard knob or ward robe knob 50 mm	each	₹ 40.00
08037	Brass screws 50 mm	100 Nos	₹ 230.00
08038	Brass screws 40 mm	100 Nos	₹ 175.00
08039	Brass screws 30 mm	100 Nos	₹ 145.00
08040	Brass screws 25 mm	100 Nos	₹ 105.00
08041	Brass screws 20 mm	100 Nos	₹ 102.00
08042	Chromium plated Brass handles 125 mm with plate 175 x32 mm	Each	₹ 208.00
08043	Chromium plated Brass handles 100 mm with plate 150 x 32 mm	Each	₹ 180.00
08044	Chromium plated Brass handles 75mm with plate 125x32 mm	Each	₹ 155.00
08045	Chromium plated Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	₹ 609.00
08046	Chromium plated brass casement window fastener	each	₹ 102.00
08047	Chromium plated Brass casement stays (straight peg type) 300 mm weighing not less than 0.33 kg	each	₹ 174.00
08048	Chromium plated Brass casement stays (straight peg type) 250 mm weighing not less than 0.28 kg	each	₹ 145.00
08049	Chromium plated Brass casement stays (straight peg type) 200 mm weighing not less than 0.24 kg	each	₹ 130.00
08050	Chromium plated Brass Night latch	each	₹ 558.00
08051	Chromium plated Brass Wardrobe Knob 50 mm	each	₹ 52.00
08052	Chromium plated Brass screws 50 mm	100 Nos	₹ 256.00
08053	Chromium plated Brass screws 40 mm	100 Nos	₹ 228.00
08054	Chromium plated Brass screws 30 mm	100 Nos	₹ 167.00
08055	Chromium plated Brass screws 25 mm	100 Nos	₹ 130.00
08056	Chromium plated Brass screws 20 mm	100 Nos	₹ 108.00
08057	Chromium plated Brass curtain rod 12 mm dia 1.25mm thick	metre	₹ 210.00
08058	Chromium plated Brass curtain rod 20 mm dia 1.25mm thick	metre	₹ 270.00
08059	Chromium plated Brass curtain rod 25 mm dia 1.25mm thick	metre	₹ 380.00
08060	Bright finished or black enameled mild steel butt hinges 125x65x2.12 mm	10 Nos	₹ 155.00
08061	Bright finished or black enameled mild steel butt hinges 100x58x1.90 mm	10 Nos	₹ 100.00
08062	Bright finished or black enameled mild steel butt hinges 75x47x1.70 mm	10 Nos	₹ 75.00
08063	Bright finished or black enameled mild steel butt hinges 50x37x1.50 mm	10 Nos	₹ 75.00
08064	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	₹ 50.00
08065	Bright finished or black enameled mild steel screws 50 mm	100 Nos	₹ 75.00
08066	Bright finished or black enameled mild steel screws 40 mm	100 Nos	₹ 60.00
08067	Bright finished or black enameled mild steel screws 30 mm	100 Nos	₹ 50.00
08068	Bright finished or black enameled mild steel screws 25 mm	100 Nos	₹ 45.00

Code No.	Description	Unit	Rate
08069	Bright finished or black enameled mild steel screws 20 mm	100 Nos	₹ 35.00
08070	Bright finished or black enameled mild steel bolts and nuts 50x6 mm	each	₹ 10.00
08071	Oxidised mild steel butt hinges 125x65x2.12 mm	10 Nos	₹ 162.00
08072	Oxidised mild steel butt hinges 100x58x1.90 mm	10 Nos	₹ 100.00
08073	Oxidised mild steel butt hinges 75x47x1.70 mm	10 Nos	₹ 75.00
08074	Oxidised mild steel butt hinges 50x37x1.50 mm	10 Nos	₹ 68.00
08075	Oxidised mild steel parliamentary hinges 150x125x27x2.8 mm	10 Nos	₹ 365.00
08076	Oxidised mild steel parliamentary hinges 125x125x27x2.8 mm	10 Nos	₹ 335.00
08077	Oxidised mild steel parliamentary hinges 100x125x27x2.8 mm	10 Nos	₹ 250.00
08078	Oxidised mild steel parliamentary hinges 75x100x20x2.24 mm	10 Nos	₹ 230.00
08079	Oxidised mild steel single acting spring hinges 150 mm	each	₹ 128.00
08080	Oxidised mild steel single acting spring hinges 125 mm	each	₹ 118.00
08081	Oxidised mild steel single acting spring hinges 100 mm	each	₹ 98.00
08082	Oxidised mild steel double acting spring hinges 150 mm	each	₹ 125.00
08083	Oxidised mild steel double acting spring hinges 125 mm	each	₹ 130.00
08084	Oxidised mild steel double acting spring hinges 100 mm	each	₹ 105.00
08085	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	₹ 62.00
08086	Oxidised mild steel sliding door bolt 300x16 mm	each	₹ 105.00
08087	Oxidised mild steel sliding door bolt 250x16 mm	each	₹ 105.00
08088	Oxidised mild steel door latch 300x20x6 mm	each	₹ 60.00
08089	Oxidised mild steel door latch 250x20x6 mm	each	₹ 48.00
08090	Oxidised mild steel tower bolt (barrel type) 250x10 mm	each	₹ 52.00
08091	Oxidised mild steel tower bolt (barrel type) 200x10 mm	each	₹ 45.00
08092	Oxidised mild steel tower bolt (barrel type) 150x10 mm	each	₹ 40.00
08093	Oxidised mild steel tower bolt (barrel type) 100x10 mm	each	₹ 34.00
08094	Oxidised mild steel handles 125 mm	each	₹ 20.00
08095	Oxidised mild steel handles 100 mm	each	₹ 15.00
08096	Oxidised mild steel handles 75 mm	each	₹ 12.00
08097	Oxidised mild steel hasps and staples(safety type) 150 mm	10 Nos	₹ 140.00
08098	Oxidised mild steel hasps and staples(safety type) 115 mm	10 Nos	₹ 120.00
08099	Oxidised mild steel hasps and staples(safety type) 90 mm	10 Nos	₹ 90.00
08100	Oxidised mild steel screws 50 mm	100 Nos	₹ 88.00
08101	Oxidised mild steel screws 40 mm	100 Nos	₹ 75.00
08102	Oxidised mild steel screws 30 mm	100 Nos	₹ 56.00
08103	Oxidised mild steel screws 25 mm	100 Nos	₹ 56.00
08104	Oxidised mild steel screws 20 mm	100 Nos	₹ 45.00
08105	Anodised Aluminium butt hinges 125x75x4 mm	10 Nos	₹ 645.00

Code No.	Description	Unit	Rate
08106	Anodised Aluminium butt hinges 125x63x4 mm	10 Nos	₹ 580.00
08107	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos	₹ 630.00
08108	Anodised Aluminium butt hinges 100x63x3.2 mm	10 Nos	₹ 510.00
08109	Anodised Aluminium butt hinges 100x63x4 mm	10 Nos	₹ 530.00
08110	Anodised Aluminium butt hinges 75x63x4 mm	10 Nos	₹ 450.00
08111	Anodised Aluminium butt hinges 75x63x3.2 mm	10 Nos	₹ 300.00
08112	Anodised Aluminium butt hinges 75x45x3.2 mm	10 Nos	₹ 230.00
08113	Anodised Aluminium sliding door bolt 300x16 mm	each	₹ 180.00
08114	Anodised Aluminium sliding door bolt 250x16 mm	each	₹ 145.00
08115	Anodised Aluminium tower bolt (barrel type) 300x10 mm	10 Nos	₹ 730.00
08116	Anodised Aluminium tower bolt (barrel type) 250x10 mm	10 Nos	₹ 530.00
08117	Anodised Aluminium tower bolt (barrel type) 200x10 mm	10 Nos	₹ 470.00
08118	Anodised Aluminium tower bolt (barrel type) 150x10 mm	10 Nos	₹ 420.00
08119	Anodised Aluminium tower bolt (barrel type) 100x10 mm	10 Nos	₹ 310.00
08120	Anodised Aluminium handles 125 mm with plate 175 x 32 mm	10 Nos	₹ 400.00
08121	Anodised Aluminium handles 100 mm with plate 150 x 32 mm	10 Nos	₹ 280.00
08122	Anodised Aluminium handles 75mm with plate 125 x 32 mm	10 Nos	₹ 230.00
08123	Anodised Aluminium kicking plate 50 cm long 100x3.15 mm	each	₹ 140.00
08124	Block board construction flush door with teak wood ply on both faces 35 mm thick	sqm	₹ 1,700.00
08125	Block board construction flush door with teak wood ply on both faces 30 mm thick	sqm	₹ 1,600.00
08126	Block board construction flush door with teak wood ply on both faces 25 mm thick	sqm	₹ 1,500.00
08127	Block board construction flush door with commercial ply on both faces 35 mm thick	sqm	₹ 1,050.00
08128	Block board construction flush door with commercial ply on both faces 30 mm thick	sqm	₹ 950.00
08129	Block board construction flush door with commercial ply on both faces 25 mm thick	sqm	₹ 880.00
08130	Block board construction flush door lipping	sqm of door area	₹ 324.00
08131	Square vision panel in Block board construction flush door	sqm of door area	₹ 135.00
08132	Circular vision panel in Block board construction flush door	Sqm of door area	₹ 210.00
08133	Decorative type Louvers in Block board construction flush door	sqm of door area	₹ 335.00
08134	Rebate cutting in Block board construction flush door	sqm of door area	₹ 98.00
08135	Decorative plywood 4 mm	sqm	₹ 400.00
08136	Glue	kilogram	₹ 135.00
08137	Synthetic enamel paint in all shades except black or chocolate shade	litre	₹ 180.00
08139	Mild steel round bar above 12 mm dia	quintal	₹ 4,010.00

Code No.	Description	Unit	Rate
08143	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	₹ 15.00
08144	Sal wood scantling / plank	10 cudm	₹ 480.00
08145	G.I. plain washer for seam bolts	100 Nos	₹ 40.00
08146	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	₹ 360.00
08147	Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm).	sqm	₹ 535.00
08148	Ply wood 5 ply with commercial ply on both faces 6 mm thick	sqm	₹ 455.00
08149	Oxidised mild steel pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	₹ 60.00
08150	Brass cupboard lock 6 levers (best make of approved quality) 40 mm size	each	₹ 75.00
08151	Brass cupboard lock 6 levers (best make of approved quality) 50 mm size	each	₹ 85.00
08152	Brass cupboard lock 6 levers (best make of approved quality) 65 mm size	each	₹ 90.00
08153	Brass cupboard lock 6 levers (best make of approved quality) 75 mm size	each	₹ 110.00
08154	Brass hanging type door stopper 150 mm	each	₹ 78.00
08155	Hydraulic door closer bottle type M.S. body with necessary accessories and screws complete	each	₹ 625.00
08156	Anodised Aluminium hanging type door stopper	each	₹ 25.00
08157	Anodised Aluminium pull bolt lock (locking bolt) of size 85 mmx42 mm with screws, bolts ,nuts and washers complete	each	₹ 60.00
08158	Anodised Aluminium Casement stay 250 mm	each	₹ 35.00
08159	Nickeled Chromium Brass cupboard lock 40 mm size	each	₹ 75.00
08160	Nickeled Chromium Brass cupboard lock 50 mm size	each	₹ 85.00
08161	Nickeled Chromium Brass cupboard lock 65 mm size	each	₹ 98.00
08162	Nickeled Chromium Brass cupboard lock 75 mm size	each	₹ 125.00
08163	Ply wood 5 ply with teak ply on both faces 9 mm thick	sqm	₹ 920.00
08164	Ply wood 5 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	₹ 722.00
08165	Ply wood 7 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	₹ 825.00
08166	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	₹ 295.00
08167	Pair of Anodised Aluminium lever handles for 100mm mortice latch and lock	each	₹ 350.00
08168	Joint tape roll	roll	₹ 145.00
08169	Dash fastener/ Chemical fastener	each	₹ 30.00
08170	All drive screws (for gypsum board)	100 Nos	
08171	Primer (for gypsum board)	litre	₹ 95.00
08172	Chromium plated brackets (curtain rods)	each	₹ 10.00
08173	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia. of wire 0.63 mm	sqm	₹ 275.00
08174	Frosted glass sheet of nominal thickness 4 mm (weighing not less than 10 kg/sqm)	sqm	₹ 400.00

Code No.	Description	Unit	Rate
08175	Nickel plated M.S. pipe 20 mm dia.	metre	₹ 100.00
08176	Nickel plated M.S. Brackets for curtain rod 20 mm	each	₹ 10.00
08177	Nickel plated M.S. Brackets for curtain rod 25 mm	each	₹ 10.00
08178	Oxidised mild steel screws 35 mm	100 Nos	₹ 55.00
08179	Mild steel conduit pipe (heavy type) ISI marked-20 mm dia.	metre	₹ 65.00
08180	Mild steel conduit pipe (heavy type) ISI marked-25 mm dia.	metre	₹ 75.00
08181	Teak wood lipping of size 25x3 mm in pelmets	metre	₹ 35.00
08182	Flat pressed 3 layer and graded particle board (medium density) Grade 1 conforming to IS : 3087 - 18 mm thick	sqm	₹ 455.00
08183	Aluminium tee channel (heavy duty) with rollers and stop end	metre	₹ 62.00
08184	Aluminium hanging floor door stopper with twin rubber & stopper	each	₹ 40.00
08185	Hydraulic door closer tubular type Aluminium section body	each	₹ 865.00
08186	Oxidised M.S.casement stay (straight peg type) 300 mm not less than 0.33 kg	each	₹ 34.00
08187	Oxidised M.S.casement stay (straight peg type) 250 mm not less than 0.28 kg	each	₹ 30.00
08188	Oxidised M.S.casement stay (straight peg type) 200 mm not less than 0.24 kg	each	₹ 25.00
08189	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick plain type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	₹ 1,850.00
08190	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick both sides prelaminated type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	₹ 2,050.00
08191	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick one side prelaminated type-I, and other side balancing lamination, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	₹ 2,000.00
08192	Factory made 30 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of sheet glass using 10 kg/ sqm glass panes	sqm	₹ 1,700.00
08193	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm on both directions with wire of dia 0.63 mm	sqm	₹ 1,700.00

Code No.	Description	Unit	Rate
08194	Factory made 30 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm on both directions with wire of dia 0.63 mm	sqm	₹ 1,500.00
08195	Laminated veneer lumber confirming to TADSS IS:1995 manufactured in factory in frames of doors, windows	10 cudm	₹ 730.00
08196	Oxidised M.S. safety chain (weighing not less than 450 gms) for door	each	₹ 62.00
08197	25 mm thick particle board	sqm	₹ 490.00
08198	IInd class teak wood lipping 25 mm wide x 12 mm thick	metre	₹ 55.00
08199	25 mm thick melamine faced prelaminated three layer particle board	sqm	₹ 850.00
08200	For flush door shutters Extra for providing teak veneering on one side instead of commercial veneering	sqm	₹ 375.00
08201	Expandable fastener with plastic sleeve and M.S. screws. 25 mm long	each	₹ 12.00
08202	Expandable fastener with plastic sleeve and M.S. screws. 32 mm long	each	₹ 14.00
08203	Expandable fastener with plastic sleeve and M.S. screws. 40 mm long	each	₹ 16.00
08204	Expandable fastener with plastic sleeve and M.S. screws. 50 mm long	each	₹ 20.00
08205	12 mm M.S. 'U' beading	metre	₹ 20.00
08206	Glass reinforced Gyp sum (GRG) board 8.5 mm thick	sqm	₹ 270.00
08207	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm	metre	₹ 85.00
08208	Galvanised M.S. sheet 0.50 mm thick pressed stud. 48x34x36 mm	metre	₹ 95.00
08209	Aluminium single cleat of size 30x32x3	each	₹ 20.00
08210	Aluminium grip strip of size 50x12x2	each	₹ 15.00
08211	25 mm prelaminated flush door both side decorative	sqm	₹ 880.00
08212	Aluminium U beading	kilogram	₹ 250.00
08213	Glass sheet (Pin headed) 4 mm thick	sqm	₹ 345.00
08214	Veneered particle board with commercial veneering on both sides 12 mm thick	sqm	₹ 525.00
08215	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	₹ 785.00
08216	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)18 mm thick	sqm	₹ 890.00
08217	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)25 mm thick	sqm	₹ 960.00

Code No.	Description	Unit	Rate
08218	Prelaminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	₹ 815.00
08219	Oxidised M. S. hinges finished with nickel plating 50 mm (Over all width)	metre	₹ 60.00
08220	Oxidised M. S. hinges finished with nickel plating 65 mm (Over all width)	metre	₹ 45.00
08221	PTMT handle 125x34x24mm	Each	₹ 28.00
08222	PTMT handle 150x34x24mm	Each	₹ 32.00
08223	PTMT butt hinges 75x60x10mm	Each	₹ 40.00
08224	PTMT butt hinges 100x75x10mm	Each	₹ 56.00
08225	PTMT Tower bolt 152x42x18mm	Each	₹ 65.00
08226	PTMT Tower bolt 202x42x18mm	Each	₹ 80.00
08227	PTMT door catcher 72x42mm	Each	₹ 27.00
08228	Coir veneered board 4mm thick	sqm	₹ 315.00
08229	Coir veneered board 6mm thick	sqm	₹ 420.00
08230	Coir veneered board 18mm thick	sqm	₹ 1,105.00
08231	24 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	₹ 1,400.00
08232	30 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	₹ 1,520.00
08233	Factory made PVC rigid foam paneled shutter i/c carriage	sqm	₹ 2,275.00
08234	Factory made PVC rigid foam paneled shutter as per IS : 4020 i/c carriage	sqm	₹ 2,685.00
08235	Factory made PVC rigid foam sheet 1mm thick	sqm	₹ 210.00
08236	48mmX40mmX1.5mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	₹ 185.00
08237	Factory made door frame PVC extruded sheet i/c carriage	metre	₹ 350.00
08238	Powder coated M.S. butt hinges 100mm X58mmX1.9mm	10 Nos	₹ 100.00
08239	Stainless steel screws 50 mm	100 Nos	₹ 275.00
08240	Stainless steel screws 40 mm	100 Nos	₹ 215.00
08241	Stainless steel screws 30 mm	100 Nos	₹ 150.00
08242	Stainless steel screws 20 mm	100 Nos	₹ 120.00
08243	Stainless steel butt hinges 125x64x1.9 mm IS : 12817 marked	10 Nos	₹ 360.00
08244	Stainless steel butt hinges 100x58x1.9 mm IS : 12817 marked	10 Nos	₹ 250.00
08245	Stainless steel butt hinges 75x47x1.8 mm IS : 12817 marked	10 Nos	₹ 200.00
08246	Stainless steel butt hinges 50x37x1.5 mm IS : 12817 marked	10 Nos	₹ 150.00
08247	Stainless steel butt hinges (heavy weight) 125x64x2.5 mm IS : 12817 marked	10 Nos	₹ 400.00
08248	Stainless steel butt hinges (heavy weight) 100x60x2.5 mm IS : 12817 marked	10 Nos	₹ 270.00
08249	Stainless steel butt hinges (heavy weight) 75x50x2.5 mm IS : 12817 marked	10 Nos	₹ 230.00
08250	M.S. heavy weight but hinges 125x90x4.0mm IS : 1341 marked.	10 Nos	₹ 360.00

Code No.	Description	Unit	Rate
08251	M.S. heavy weight butt hinges 100x75x3.5 mm IS: 1341 marked	10 Nos.	₹ 200.00
08252	M.S. heavy weight butt hinges 75x60x3.1 mm IS: 1341 marked	10 Nos	₹ 110.00
08253	M.S. heavy weight butt hinges 50x40x2.5 mm IS : 1341 marked	10 Nos	₹ 95.00
08254	1mm thick 35mm wide bright finished stainless steel piano hinges .	metre	₹ 55.00
08255	8 mm thick tapered edge calcium silicate board .	sqm	₹ 275.00
08256	10 mm thick calcium silicate board.	sqm	₹ 430.00
08257	Telescopic drawer channels 300mm long .	set	₹ 165.00
08258	Stainless steel roller for sliding arrangement in racks/ cupboards/cabinets shutter .	each	₹ 12.00
08259	50mmX42mmX2mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	₹ 175.00
08260	25mm thick factory made PVC flush door shutter i/c carriage.	sqm	₹ 1,700.00
08261	Factory made glass reinforced plastic door frame 90x45 mm i/c carriage.	metre	₹ 340.00
08262	30 mm thick factory made glass fiber reinforced plastic panel door shutter i/c carriage.	sqm	₹ 1,680.00
08263	Factory made solid PVC door frame 60 x 30mm including carriage.	metre	₹ 315.00
08264	28mm factory made solid PVC panel door shutter including carriage.	sqm	₹ 2,000.00
08265	Fiber glass reinforced plastic chajja.	sqm	₹ 3,500.00
08266	Magnetic catcher triple strip vertical type.	each	₹ 25.00
08267	Magnetic catcher double strip horizontal type.	each	₹ 20.00
08268	100 mm mortice lock with 6 levers for aluminium door.	each	₹ 365.00
08269	12.5 mm thick Glass fibre reinforced Gypsum board .	sqm	₹ 215.00
08270	Ceiling sections 0.55 mm thick having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm.	metre	₹ 60.00
08271	Perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm.	metre	₹ 35.00
08272	Nylon sleeves & wooden screws (40mm)	each	₹ 5.00
08273	Counter sunk ribbed head screw 25mm.	cent	₹ 85.00
08274	12mm thick marine plywood conforming to IS:710	sqm	₹ 730.00
08275	12mm thick fire retardant plywood conforming to IS: 5509.	sqm	₹ 840.00
08276	1.5mm thick decorative laminated sheet	sqm	₹ 550.00
08277	1.0mm thick decorative laminated sheet	sqm	₹ 360.00
08278	30 mm thick factory made glass fiber reinforced plastic flush door shutter i/c carriage.	sqm	₹ 2,000.00
08279	Karai Wood scantlings	10 cudm	₹ 208.00
08280	Local Teak Wood- scantling	10 cudm	₹ 257.00
08281	Other Wood(Jam, Garjan, Chamal)	10 cudm	₹ 194.00
08282	Soft Wood	10 cudm	₹ 163.00
08283	Gamair Wood	10 cudm	₹ 350.00
08284	Ply wood 7 ply with teak ply on both faces 9 mm thick	Sqm	₹ 700.00
08285	Extra for selected planks of Gamair wood	10 cudm	₹ 50.00

Code No.	Description	Unit	Rate
08286	Gamair wood lipping/ moulded beading or Taj beading of size 18 X 5 mm	metre	₹ 15.00
08287	35 mm thick HDF, BWP type Shutter as per IS : 15380 - 2003 & IS : 848	Sqm	₹ 1,720.00
08288	Sal wood - beam	10 cudm	₹ 450.00
08289	Karai wood- beams	10 cudm	₹ 380.00
08290	Local Teak Wood - Planks	10 cudm	₹ 350.00
08291	Bamboo wood shutter for doors	cum	₹ 1,80,000.00
08292	Bamboo wood Panelling	cum	₹ 1,80,000.00
08293	15 mm thick, light weight,fully perforated square/butt edge integral densified,false ceiling tiles of size 595x595 mm.	sqm	₹ 980.00
08294	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm	metre	₹ 69.00
08295	Galvanised M.S. sheet 0.50 mm thick pressed stud : 48x34x36 mm	metre	₹ 87.00
08296	Self tapping pan head nickle coated mild steel screws of size 13 x 3.2 mm	1000 Nos.	₹ 645.00
08297	12 mm dia 50 mm long wedge type expanded zinc alloy dash fastner	each	₹ 10.00
08298	Glass wool 50 mm thick	sqm	₹ 280.00
08299	Calcium silicate base compound for jointing calcium silicate tiles	kilogram	₹ 30.00
08300	Fibre joint tape 50 mm wide (90 metre) roll	each roll	₹ 200.00
08301	Calcium silicate base compound for jointing calcium silicate tiles	kilogram	₹ 32.00
08302	Pre-laminated with decorative lamination on both side exterior Grade-I MDF Board 12 mm thick confirming to IS:14587	Sqm	₹ 460.00
08303	Pre-laminated with decorative lamination on both side exterior Grade-I MDF Board 18 mm thick confirming to IS:14587	Sqm	₹ 597.00
08304	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 25 mm thick confirming to IS: 14587	Sqm	₹ 900.00
08305	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 12 mm thick confirming to IS:14587		₹ 450.00
08306	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 18 mm thick confirming to IS:14587		₹ 580.00
08307	PVC edge bending tape 2.00 mm thick	metre	₹ 30.00
08308	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	metre	₹ 40.00
08309	Bright finished or black enameled mild steel screws 25 mm	100	₹ 37.00
08310	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	metre	₹ 40.00
09001	20 mm dia holding down bolts	Quintal	₹ 5,650.00
09002	275 mm long wire spring grade no 2 for rolling shutters	Each	₹ 365.00
09003	Ball bearing for rolling shutters	Each	₹ 300.00

Code No.	Description	Unit	Rate
09005	Circular C.I. Box for ceiling fan	Each	₹ 60.00
09006	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 10.00 sq.m and up to 16.80 sq.m area of door	Sqm	₹ 630.00
09007	Extra for mechanical devices chain and cranked operation for operating rolling shutters exceeding 16.80 sq.m area of door	Sqm	₹ 630.00
09008	Extra for providing grilled rolling shutters with 8 mm dia M.S. rod instead of laths	Sqm	₹ 290.00
09009	Iron pintels including welded pin	Each	₹ 45.00
09010	Mild steel sheets with bolts and nuts to rest on pintels	Each	₹ 135.00
09011	Mild steel tubes electric resistant or induction butt welded	Kilogram	₹ 65.00
09012	Mild steel tubes hot finished seamless type	Kilogram	₹ 60.00
09013	Mild steel tubes hot finished welded type	Kilogram	₹ 56.00
09014	Pulley 25 mm dia	Each	₹ 55.00
09015	Pulley 40 mm dia	Each	₹ 65.00
09016	Rolling shutter made of 80x1.25 mm machine rolled laths	Sqm	₹ 1,340.00
09017	Rolling shutters made of 80x1.2 mm machine rolled laths	Sqm	₹ 1,200.00
09018	Rolling shutters made of 80x0.90 mm machine rolled laths	Sqm	₹ 1,100.00
09019	Top cover for rolling shutters 1.25 mm thick	Metre	₹ 900.00
09020	Top cover of Rolling shutters 0.90 mm thick	Metre	₹ 330.00
09021	Top cover of Rolling shutters 1.20 mm thick	Metre	₹ 350.00
09022	Welding by electric plant in/c wages for welder	Cm	₹ 2.00
09023	Welding by gas plant in/c wages for welder	Cm	₹ 2.00
09024	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 60mm	10 Nos.	₹ 286.00
09025	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 80mm	10 Nos.	₹ 330.00
09026	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 120mm	10 Nos.	₹ 400.00
09027	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 140mm	10 Nos.	₹ 505.00
09028	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 160mm	Sqm	₹ 630.00
09029	Stainless steel (Grade-304) hollow section round/square tubes	kg	₹ 250.00

Code No.	Description	Unit	Rate
09030	Stainless steel bolts/square bar and plates	kg	₹ 130.00
09031	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia. of wire 0.63 mm	sqm	₹ 286.00
09032	Stainless steel wire guage (Grade-304) aperture 1.4mm and 0.50 mm dia wire	sqm	₹ 715.00
09033	Steel beading size 10 x 10 x 1.6 mm (box type)	metre	₹ 31.00
09034	Structural hollow steel section conforming to IS: 4923, Grade: Yst 310 or Circular Section conforming to IS: 1161, Grade: Yst 310	kg	₹ 62.00
09035	Structural steel section confirming to IS 2062 -1999 grade B Fe 410, normalized control cooled , yield strength + 250 MPa as per latest IS Code	kg	₹ 49.00
09036	High strength friction grip bolts (HSFG bolts) of class / grade EN 8	kg	₹ 155.00
10023	Pink marble slab plain 18mm thick	Sqm	₹ 890.00
10001	25 mm thick pre-polished colored concrete designer tiles of size 300mm x 300mm (using 50% white cement and 50% ordinary cement)	Sqm	₹ 385.00
10002	8 mm thick marble tiles (polished) Raj Nagar	Sqm	₹ 435.00
10003	Acid and alkali resistant tiles 300x300 mm size, 10 mm thick	10 Nos.	₹ 594.00
10004	Acid proof cement	tonne	₹ 9,000.00
10005	Agaria white marble slab plain 18 mm thick	Sqm	₹ 1,300.00
10006	Aluminium Strip 40 mm wide and 2 mm thick	Kg	₹ 200.00
10007	Black colour dark shade pigment	Kg	₹ 85.00
10008	Black Zebra marble slab plain 18mm thick	Sqm	₹ 571.00
10009	Ceramic Glazed Tiles 1st quality 400 x 400mm in all shades and designs	Sqm	₹ 360.00
10010	Ceramic Glazed Tiles 1st quality 300 x 300mm in all shades and designs	Sqm	₹ 270.00
10011	Ceramic Glazed Tiles 1st quality minimum thickness 5mm in all colours shades and designs	Sqm	₹ 270.00
10012	Chequered tiles 18 mm thick (dark shade)	sqm	₹ 195.00
10013	Chequered terrazzo tiles 22 mm thick(light shade)	sqm	₹ 330.00
10014	Glass strip 40 mm wide 4 mm thick	metre	₹ 22.00
10017	Green or blue medium shade pigment	Kg	₹ 85.00
10018	Hardening Compound	Kg	₹ 50.00
10019	High polymer modified quickset tile adhesive	Kg	₹ 12.00
10020	Kota stone slab 20 mm to 25 mm thick (semi-polished)	Sqm	₹ 335.00
10024	Precast terrazzo tiles 22 mm thick (light shade)	sqm	₹ 290.00
10025	Rectified Ceramic Glazed Tiles 1st quality 300 x 300 or more in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	Sqm	₹ 470.00
10026	Rectified Ceramic Glazed Tiles 1st quality 300x 300 or more in all shades designs White, Ivory, Grey, Fume Red Brown etc.	Sqm	₹ 400.00
10027	Red, chocolate, orange, buff or yellow (red oxide of iron) light shade pigment	Kg	₹ 85.00
10028	Udaipur green marble slab plain 18mm thick	Sqm	₹ 875.00
10029	Vitrified floor tile 100x100 cm conforming to IS: 15622 : 2006 Group (B 1 a)	Sqm	₹ 1,400.00
10030	Vitrified floor tile 50x50 cm conforming to IS: 15622 : 2006 Group (B 1 a)	Sqm	₹ 510.00

Code No.	Description	Unit	Rate
10031	Vitrified floor tile 60x60 cm conforming to IS: 15622 : 2006 Group (B 1 a)	Sqm	₹ 615.00
10032	Vitrified floor tile 80x80 cm conforming to IS: 15622 : 2006 Group (B 1 a)	Sqm	₹ 860.00
10034	White marble slab Markana second quality plain veined 18 mm thick	Sqm	₹ 2,000.00
10035	White marble slab Markana second quality plain veined 14 mm thick	Sqm	₹ 1,700.00
10041	Agaria white marble slab plain 14 mm thick	Sqm	₹ 1,000.00
10042	Black Zebra marble slab plain 14mm thick	Sqm	₹ 435.00
10043	Udaipur green marble slab plain 14mm thick	Sqm	₹ 750.00
10044	Pink marble slab plain 14mm thick	Sqm	₹ 795.00
10045	Ceramic Glazed Tiles 1st quality 600 x 600mm in all shades and designs	Sqm	₹ 430.00
10046	Epoxy grout	kg	₹ 380.00
10047	Border tiles	each	₹ 17.00
10048	Ceramic Tiles Pieces for Crazy Flooring	quintal	₹ 140.00
10049	Synthetic polyester triangular fibre of length 12 mm, effective dia. 10-40 microns and specific gravity of 1.34 to 1.40	kg	₹ 375.00
10050	White marble rajnagar plain stone pieces for crazy flooring	quintal	₹ 160.00
10051	Tile fixing chemical adhesive	kg	₹ 22.00
10052	Glass mosaic tiles (20 mm x 20 mm x 4 mm)	sqm	₹ 1,185.00
10053	Cement polymer Grout Compound	kg	₹ 30.00
10054	Acid for cleaning tiles	litre	₹ 20.00
10055	500x500x40 mm thick Turf paver	sqm	₹ 580.00
10056	Bamboo wood Tile Flooring 14mm thick of minimum size 1800mm x 130mm	sqm	₹ 3,775.00
10057	Bamboo wood Quarter Round 18mm thick of size 1900mm x 18mm	metre	₹ 125.00
10058	Bamboo wood door reducer 14mm thick of size 1900mm x 44mm	metre	₹ 275.00
10059	Expanded poly ethylene Foam sheet 4mm thick of Density 40kg/m3	sqm	₹ 18.00
10060	Silicon based Joint Sealant for Tiles	kg	₹ 150.00
10061	Rubber base Adhesive	kg	₹ 160.00
10062	Bamboo wood Skirting 14mm thick of Size 1900mm x 85mm	metre	₹ 325.00
10063	Bamboo wood Tile Wall Cladding 10mm thick of size 1900mm x 135mm	sqm	₹ 3,375.00
10064	Bamboo wood T-mold 14mm thick of size 1900mm x 44mm	metre	₹ 275.00
10065	Bamboo wood Threshold 14mm thick of size 1900mm x 44mm	metre	₹ 275.00
10066	Expanded poly ethylene Foam sheet 1mm thick of Density 40kg/m3	sqm	₹ 8.50
10067	Laminated wooden plank for Flooring 8mm thick of minimum size 1202mm x 192mm : AC3 Grade	sqm	₹ 985.00
10068	Laminated wooden plank for Flooring 8mm thick of minimum size 1202mm x 192mm : AC4 Grade	sqm	₹ 1,200.00
10069	Laminated wood T-profile 15mm thick of size 2286mm x 45mm	metre	₹ 295.00
10070	Laminated wood door reducer 12mm thick of size 2286mm x 45mm	metre	₹ 295.00

Code No.	Description	Unit	Rate
10071	Laminated wooden Skirting 12mm thick of Size 2286mm x 60mm	metre	₹ 208.00
11001	12 thick particle board ceiling tile	sqm	₹ 125.00
11002	200G virgin polythene sheet	sqm	₹ 6.00
11003	3 mm thick translucent white acrylic plastic sheet	sqm	₹ 590.00
11004	Adjustment clip 85x30x0.8 mm	each	₹ 6.00
11005	All drive screws (for gypsum board)	100 Nos	₹ 65.00
11006	Bitumen washer	100 Nos	₹ 32.00
11011	Dash fastener 6 mm dia 50 mm long	each	₹ 10.00
11012	Dash fastener/ Chemical fastener	each	₹ 14.00
11013	Expanded polystyrene type - SE 50 mm thick	sqm	₹ 165.00
11014	Expanded polystyrene type N- Normal 50 mm thick	sqm	₹ 135.00
11017	G.I. Limpet washer	100 Nos	₹ 37.00
11018	G.I. plain washer for seam bolts	100 Nos	₹ 32.00
11019	Galvanised steel corrugated sheets	quintal	₹ 5,635.00
11020	Galvanised steel J or L hooks 8 mm dia	10 Nos	₹ 125.00
11023	Hanger rod 4 mm thick	each	₹ 10.00
11025	Galvanised Steel Intermediate cross T section 24x25x0.33 mm (0.6 mtrs)	each	₹ 20.00
11026	Galvanised Steel Intermediate cross T section 24x25x0.33 mm (1.2 mtrs)	each	₹ 39.00
11027	Joint filler	kilogram	₹ 30.00
11028	Joint finisher	kilogram	₹ 27.00
11029	Joint tape roll	roll	₹ 115.00
11030	Galvanised Steel Main T ceiling sections 24x38x0.33 mm (3 metre long)	each	₹ 116.00
11033	Galvanised Steel Perimeter wall angle 24x24x0.40 mm (3 metre long)	each	₹ 85.00
11034	Plain ceiling tiles (BWP type phenol formaldehyde synthetic resin bonded) (600x600x12 mm)	each	₹ 130.00
11036	Polyvinyl chloride sheet 400 micron thick	sqm	₹ 42.00
11037	Pre-painted Galvalume sheet 0.40 mm	sqm	₹ 400.00
11038	Pre-painted Galvalume sheet 0.45 mm	sqm	₹ 430.00
11039	Pre-painted Galvalume sheet 0.50 mm	sqm	₹ 515.00
11040	Pre-painted Galvalume sheet 0.60 mm	sqm	₹ 610.00
11041	Pre-painted Galvalume sheet 0.80 mm	sqm	₹ 812.00
11042	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.45mm thick	metre	₹ 240.00
11043	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.4mm thick	metre	₹ 230.00
11044	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.5mm thick	metre	₹ 282.00
11045	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.6mm thick	metre	₹ 340.00
11046	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.8mm thick	metre	₹ 434.00
11049	Pre-coated galvanised iron profile sheet 0.50 mm TCT	sqm	₹ 400.00
11054	Pre-coated galvanised steel plain ridges/Valley/Gutter/Flashing 0.5mm thick	metre	₹ 245.00
11057	Pressed clay tiles	1000 Nos	₹ 10,000.00
11058	Resin Bonded Glass wool 16 kg/m³ 50 mm thick	sqm	₹ 112.00
11059	Resin Bonded Glass wool 24 kg/m³ 50 mm thick	sqm	₹ 160.00
11062	Soffit cleat (Size 27x37x25x1.60 mm)	each	₹ 5.00

Code No.	Description	Unit	Rate
11066	u-PVC bend 87.5° 110 mm bend	each	₹ 69.00
11067	u-PVC bend 87.5° 75 mm bend	each	₹ 41.00
11068	u-PVC coupler for UPVC drainage pipes 110 mm	each	₹ 46.00
11069	u-PVC coupler for UPVC drainage pipes 75 mm	each	₹ 22.00
11070	u-PVC pipe clip 110 mm bend	each	₹ 19.00
11071	u-PVC pipe clip 75 mm bend	each	₹ 18.00
11072	u-PVC pipes (working pressure 4 kg / cm ²) Rubber (Seal) Ring 110 mm dia.	each	₹ 14.00
11073	u-PVC pipes (working pressure 4 kg / cm ²) Rubber (Seal) Ring 75 mm dia.	each	₹ 9.00
11074	u-PVC pipes (working pressure 4 kg / cm ²) Single socketed pipe 110 mm dia.	metre	₹ 150.00
11075	u-PVC pipes (working pressure 4 kg / cm ²) Single socketed pipe 75 mm dia.	metre	₹ 80.00
11076	u-PVC plain shoe 110 mm bend	each	₹ 55.00
11077	u-PVC plain shoe 75 mm bend	each	₹ 31.00
11078	u-PVC pushfit coupler (single) 110 mm thick	each	₹ 38.00
11079	u-PVC pushfit coupler (single) 75 mm thick	each	₹ 22.00
11080	u-PVC single equal Tee (with door) 110x110x110 mm	each	₹ 108.00
11081	u-PVC single equal Tee (with door) 75x75x75 mm	each	₹ 69.00
11082	u-PVC single equal Tee (without door) 110x110x110 mm	each	₹ 95.00
11083	u-PVC single equal Tee (without door) 75x75x75 mm	each	₹ 54.00
11084	UV stabilised 2 mm thick corrugated FRP sheet .	sqm	₹ 585.00
11085	UV stabilised 2 mm thick plain FRP sheet .	sqm	₹ 515.00
11087	Wire mesh (rabbit)	sqm	₹ 45.00
11088	Resin Bonded Rockwool 48 kg/m ³	sqm	₹ 135.00
11089	High Albedo paint	kg	₹ 260.00
11090	Galvanised Steel ceiling sections 80x26x0.5 mm	metre	₹ 53.00
11091	Galvanised Steel Perimeter channel 20x27x30x0.50 mm	metre	₹ 26.00
11092	Galvanised Steel Intermediate channel 15x45x15x0.90 mm	metre	₹ 44.00
11093	Galvanised Steel angle hanger (ceiling angle: 25x10x0.50 mm)	metre	₹ 15.00
11094	Galvanised Steel connecting clips (2.64 mm dia and 230 mm long GI wire)	each	₹ 5.00
11095	Galvanised Steel soffit cleat (Size 27x37x25x0.60 mm)	each	₹ 4.00
11096	12.5 mm thick tapered edge gypsum plain board	sqm	₹ 190.00
11097	Galvanised Steel soffit cleat (Size 27x37x25x0.60 mm)	each	₹ 6.00
11098	Galvanised Steel soffit cleat (Size 27x37x25x0.60 mm)	each	₹ 7.00
11099	Primer (for gypsum board)	litre	₹ 80.00
11100	12.5 mm thick tapered edge gypsum fire resistant board	sqm	₹ 287.00
11101	12.5 mm thick tapered edge gypsum moisture resistant board	sqm	₹ 320.00
11102	12.5 mm thick Fully Perforated Gypsum Plaster Board	sqm	₹ 490.00
11103	GI Metal Tile Lay-in Plain Tegular edge global white color tiles of Size 595x595mm and 0.5 mm thick	sqm	₹ 575.00

Code No.	Description	Unit	Rate
11104	GI Metal Tile Lay-in Perforated Tegular edge global white color tiles of Size 595x595mm and 0.5 mm thick	sqm	₹ 675.00
11105	PVC Laminated Gypsum Tiles (Square edge) of Size 595x595 mm and 12.5 mm thick	sqm	₹ 515.00
11106	Gypsum Tiles Fully Perforated Square edge of Size 595x595 mm and 12.5 mm thick	sqm	₹ 540.00
11107	Calcium Silicate tegular edged ceiling tiles 495x495 mm and 15 mm thick	sqm	₹ 935.00
11108	8mm thick Calcium silicate perforated tiles of size 595x595mm	sqm	₹ 735.00
11109	8 mm thick tapered edge calcium silicate board	sqm	₹ 285.00
11110	15 mm thick, light weight, integral densified micro look edged,false ceiling tiles of size 595x595 mm.	sqm	₹ 990.00
11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	₹ 28.00
11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	₹ 16.00
11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	₹ 35.00
11114	40 mm long S.S screws with plastic rawl plugs	each	₹ 3.50
11115	Powder coated steel section main-T ceiling sections 15x42x0.40 mm (3000 mm long)	each	₹ 248.00
11116	Galvanized mild steel perimeter wall angle 22x19x0.40 mm (3000 mm long)	each	₹ 121.00
11117	Powder coated Galvanised Iron intermediate cross-T section 15x42x0.40 mm (1200 mm long)	each	₹ 100.00
11118	Powder coated Galvanized Iron intermediate cross-T section 15x42x0.40mm (600 mm long)	each	₹ 50.00
11119	15 mm thick, light weight, integral densified micro look edged,false ceiling tiles of size 595x595 mm.	sqm	₹ 990.00
11120	Galvanized iron main-T ceiling sections 15x32x0.33 mm (3000 mm long)	each	₹ 208.00
11121	Galvanized iron intermediate crossT section 15x32x0.33 mm (1200 mm long)	each	₹ 85.00
11122	Galvanized iron intermediate crossT section 15x32x0.33 mm (600 mm long)	each	₹ 38.00
11123	12 mm thick micro tegular edged semi perforated GFRG (Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x 595 mm	sqm	₹ 692.00
11124	12 mm thick micro tegular edged fully perforated GFRG (Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x 595 mm	sqm	₹ 780.00
11125	With 16 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.55 to 0.6)	sqm	₹ 865.00
11126	20 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.7)	sqm	₹ 1,095.00
11127	Mineral fibre beveled tegular edged ceiling tiles 595x595 mm, 16 mm thick with bioblock, confirming to ISO 5 (class 100) specifications	sqm	₹ 945.00
11007	Bright finished or black enameled mild steel screws 40 mm	100 Nos	₹ 69.00
11015	Flame retardant face insulating board: 12 mm thick	sqm	₹ 360.00
11016	Fuel wood	quintal	
11021	Galvanised steel plain sheets	quintal	₹ 5,235.00

Code No.	Description	Unit	Rate
11031	Natural colour insulating board:12 mm thick	sqm	₹ 242.00
11035	Plug	each	₹ 11.00
11060	Roofing paint for iron sheets in red colour	litre	₹ 125.00
11061	Seam bolts and nuts 6 mm dia and 25 mm long	10 Nos	₹ 45.00
11064	Standard quality hard board sheet 3 mm thick	sqm	₹ 145.00
11065	Standard quality hard board sheet 4.5 mm thick	sqm	₹ 165.00
11086	White face insulating board:12 mm thick	sqm	₹ 275.00
12001	Red oxide Zinc chromate primer	Kg	₹ 75.00
12002	Acrylic distemper 1st quality having VOC content less than 50 gm / litre	Kg	₹ 45.00
12003	Acid proof paint (chocolate or black)	Litre	₹ 230.00
12004	Acrylic exterior paint	Litre	₹ 185.00
12005	Aluminium paint	Litre	₹ 142.00
12006	Aluminium primer	Litre	₹ 95.00
12007	Ammonium chloride	Kg	₹ 25.00
12008	Anticorrosive bituminous paint (black)	Litre	₹ 115.00
12009	Black Japan Paint	Litre	₹ 110.00
12010	Cement primer	Litre	₹ 71.00
12011	Coal Tar	Litre	₹ 35.00
12012	Colouring material	Kg	₹ 75.00
12013	Copper acetate	Kg	₹ 320.00
12014	Copper chloride	Kg	₹ 310.00
12015	Copper nitrate	Kg	₹ 235.00
12016	Crushed stone 2.36 mm to 12.5 mm size	Cum	₹ 2,850.00
12017	Dehradun white lime	Kg	₹ 7.50
12018	Dry distemper	Kg	₹ 35.00
12019	Dry hydrated lime (factory made)	Kg	₹ 320.00
12020	Epoxy paint	Litre	₹ 250.00
12021	Fire retardant paint	Litre	₹ 290.00
12022	Floor enamel paint in all shades except green	Litre	₹ 130.00
12023	Glue	Kg	₹ 135.00
12024	Hydrochloric acid	Kg	₹ 45.00
12025	Indigo	Kg	₹ 65.00
12026	Linseed oil (double boiled)	Litre	₹ 210.00
12027	Oil bound washable distemper/ Acrylic distemper	Kg	₹ 52.00
12028	Oil type wood preservative	Litre	₹ 155.00
12029	Ordinary varnish	Litre	₹ 110.00
12030	Pink or grey primer (for wood)	Litre	₹ 94.00
12031	Plaster of Paris	Kg	₹ 6.50
12032	Plastic emulsion paint	Litre	₹ 220.00
12033	Premium Acrylic smooth exterior paint	Litre	₹ 218.00
12034	Distemper Primer	Litre	₹ 70.00
12035	Soft water	Litre	₹ 3.00
12036	Spirit	Litre	₹ 72.00
12038	Superior copal varnish	Litre	₹ 145.00
12039	Superior spar varnish	Litre	₹ 145.00
12040	Synthetic enamel paint in all shades except black or chocolate shade	Litre	₹ 155.00
12041	Synthetic enamel paint in black or chocolate shade	Litre	₹ 185.00
12042	Textured exterior paint	Litre	₹ 245.00
12043	Water proofing cement paint	Kg	₹ 44.00

Code No.	Description	Unit	Rate
12044	Wax polish (ready made)	Kg	₹ 265.00
12045	White lead	Kg	₹ 155.00
12046	Whiting	Kg	₹ 6.50
12047	Wood filler (Shellac)	Kg	₹ 330.00
12048	White cement based putty	kg	₹ 25.00
12049	Water thinnable cement primer for interior wall surface, having VOC content less than 50 grams/ litre	litre	₹ 60.00
12050	Exterior primer	kg	₹ 55.00
12051	Multi Surface Paint	litre	₹ 275.00
12052	Special primer (C.W.)	litre	₹ 160.00
12053	Ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	litre	₹ 135.00
12054	Ready mixed red oxide zinc chromatic on steel / iron works having VOC content less than 250 grams/ litre	litre	₹ 130.00
12055	Water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	litre	₹ 67.00
12056	Silicon and acrylic emulsion	litre	₹ 150.00
12057	Acrylic emulsion, having VOC content less than 50 grams/ litre	litre	₹ 198.00
12058	Premium acrylic emulsion paint of interior grade, having VOC content less than 50 grams/ litre	litre	₹ 225.00
12059	Synthetic enamel paint, having VOC content less than 150 grams/ litre	litre	₹ 214.00
12060	Premixed super white gypsum plaster	kg	₹ 6.00
12061	Synthetic ployster triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40	kg	₹ 405.00
13003	Putty for wood work	Kg.	₹ 35.00
13005	Local teak wood fillets.	Cum.	₹ 31,465.00
13006	Gamir wood fillets.	Cum.	₹ 34,326.00
13007	Soft wood fillets.	Cum.	₹ 12,960.00
13008	Sal wood batten	Cum.	₹ 29,160.00
13009	Karai wood batten	Cum.	₹ 22,680.00
13010	Soft wood batten	Cum.	₹ 12,960.00
13011	Base Jack	each	₹ 168.00
13012	Spigot for standard jointing	kg	₹ 51.00
13013	Challies	each	₹ 896.00
13014	Cup lock	each	₹ 58.00
13015	Water for jetting / blowback	1000 litre	₹ 1,000.00
13016	PVC slotted pipe 200 mm dia as per IS: 12818	metre	₹ 785.00
13017	Wheel 75 mm dia. 40 mm wide	each	₹ 80.00
15001	C.I. pile shoe.	kg	₹ 59.00
15002	M.S. clamps for pile shoe.	kg	₹ 52.00
15003	Bentonite.	tonne	₹ 3,220.00
15004	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and up to 50 tonne capacity pile.	Per Test	₹ 29,250.00

Code No.	Description	Unit	Rate
15005	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & above 50 tonne and up to 100 tonne	Per Test	₹ 39,000.00
15006	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & group of two or more up to 50 tonne	Per Test	₹ 48,950.00
15007	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile up to 50 tonne capacity.	Per Test	₹ 14,985.00
15008	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile.	Per Test	₹ 23,865.00
15009	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part- IV) including preparation of pile head etc. for Group of two piles up to 50 tonne capacity each.	Per Test	₹ 29,970.00
15010	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile up to 50 tonne capacity.	Per Test	₹ 14,985.00
15011	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile above 50 tonne capacity.	Per Test	₹ 23,865.00
16001	Aluminium T or L sections	kilogram	₹ 220.00
16002	6 mm dia. G.I. adjustable hangers including clips (up to 1.2 m length)	each	₹ 33.00
16003	Aluminium casement window fastener (Anodised AC 15)	each	₹ 42.00
16004	Aluminium casement window fastener (polyester powder coated).	each	₹ 50.00
16005	Aluminium casement window fastener (powder coated).	each	₹ 46.00
16006	Aluminium round shape handle (anodised AC 15)	each	₹ 53.00
16007	Aluminium round shape handle (polyester powder coated).	each	₹ 66.00
16008	Aluminium round shape handle (powder coated)	each	₹ 57.00
16011	Aluminium washer 2 mm thick 15 mm dia	100 Nos	₹ 11.00
16012	Anodising 15 microns on aluminium sections	kilogram	₹ 40.00
16013	Anodising 25 microns on aluminium sections	kilogram	₹ 50.00
16014	Cadmium plated full threaded steel screws (30x4 mm dia.)	100 Nos	₹ 35.00
16015	Dash hold fastener 12.5 mm dia, 50 mm long with 6 mm dia bolt	each	₹ 60.00
16016	Double action hydraulic floor spring with brass cover plate	each	₹ 1,780.00

Code No.	Description	Unit	Rate
16017	Double action hydraulic floor spring with stainless steel cover plate	each	₹ 1,650.00
16018	Hermetically sealed double glazed unit made with 6mm thick clear float glass both side having 12 mm air gap.	sqm	₹ 2,200.00
16019	Masking tape.	metre	₹ 3.00
16020	Neoprene/EPDM rubber gasket	metre	₹ 30.00
16021	Polyester powder coating 50 microns on aluminium sections	kilogram	₹ 70.00
16022	Powder coating 50 microns on aluminium sections.	kilogram	₹ 64.00
16023	Silicon sealant.	cartridge	₹ 350.00
16024	Stainless steel screws 30mm x4mm.	cent	₹ 38.00
16025	Stainless steel (SS 304 grade) adjustable friction window stay 255 x19mm	each	₹ 235.00
16026	Stainless steel (SS 304 grade) adjustable friction window stay. 205 x19mm	each	₹ 200.00
16027	Stainless steel (SS 304 grade) adjustable friction window stay. 355 x19mm	each	₹ 295.00
16028	Stainless steel (SS 304 grade) adjustable friction window stay. 510 x19mm	each	₹ 530.00
16029	Stainless steel (SS 304 grade) adjustable friction window stay. 710 x19mm	each	₹ 935.00
16030	Stainless steel screws 25mm x4mm	cent	₹ 42.00
16031	Stainless steel dash fastener of 8 mm dia and 75 mm long bolt	each	₹ 14.00
16032	Aluminium Grill	kg	₹ 255.00
16033	Toughened glass 12 mm thickness	sqm	₹ 1,900.00
16034	Structural sealant	metre	₹ 33.00
16035	Spacer tape 6.4 mm thick x 6 mm wide	metre	₹ 22.00
16036	Weather Sealant - Non Staining (600 ml)	each	₹ 465.00
16037	Weather Sealant - Normal (300 ml)	each	₹ 162.00
16038	MS Brackets / Aluminium Alloy Brackets	kg	₹ 110.00
16039	Silicon gasket in kg (above 50 g/m)	kg	₹ 600.00
16040	EPDM gasket in kg (above 60 g/m)	kg	₹ 165.00
16041	Anchor Fastner - M10	each	₹ 12.00
16042	SS Bolt with washer of sizes for structural glazing / ACP cladding	each	₹ 39.00
16043	SS Screws of sizes for structural glazing / ACP cladding	each	₹ 5.00
16044	Protective Tape	metre	₹ 22.00
16045	GI flashing - 1.2 mm Thick	kg	₹ 65.00
16046	6 mm thick High performance glass	sqm	₹ 1,985.00
16047	6 mm thick clear heat strengthened glass	sqm	₹ 685.00
16048	6 mm thick clear heat strengthened glass	each	₹ 135.00
16049	ARMS GS HD- Top Hung - 20" - Type P - Couple	pair	₹ 1,705.00
16050	Connection Block or vision glass panel	each	₹ 42.00
16051	Curtain wall striker for vision glass panel	each	₹ 110.00
16052	Adjustable fastening pawl for vision glass panel	each	₹ 42.00
16053	Corner drive for vision glass panel	each	₹ 320.00
16054	Top wedge block for vision glass panel	each	₹ 148.00
16055	Glass wool of density @ 48 kg / cum with black glass tissue (BGT)	sqm	₹ 253.00
16056	SS Screws - #8 x 19	each	₹ 11.00
16057	Weather Sealant - DC 789	cartridge	₹ 143.00
16058	Cement Board	sqm	₹ 275.00
16059	Baker rod	metre	₹ 5.50

Code No.	Description	Unit	Rate
16060	4 mm thick ACP	sqm	₹ 1,100.00
16061	3 mm thick ACP	sqm	₹ 865.00
16062	Fire stop	metre	₹ 585.00
16063	GI / Aluminium Sheet (0.8 mm thick)	kg	₹ 50.00
16064	4 point façade glass bracket without flat head bolts	each	₹ 3,540.00
16065	2 point façade glass bracket (wall mounted without flat head bolts)	each	₹ 1,775.00
16066	1 point façade glass bracket (wall mounted without flat head bolts)	each	₹ 1,390.00
16067	Flate head bolt for brackets of spider glazing	each	₹ 690.00
16068	400 mm long fin plate without fastners	pair	₹ 6,345.00
16069	Stainless steel U Channel of size (50x25x2mm)	metre	₹ 153.00
16070	Non staining water resistant clear silicon	metre	₹ 64.00
16071	21mm thick clear toughened Laminated glass for fins with holes	sqm	₹ 6,400.00
17001	Bitumen felt fibre base (vegetable or animal) : As per IS 7193 Grade I	sqm	₹ 85.00
17002	Bituminous solution primer of approved quality	litre	₹ 60.00
17003	APP modified 2mm thick membrane reinforced with glass fibre matt	sqm	₹ 120.00
17004	Fuel-LPG	kg	₹ 75.00
17005	APP modified 3mm thick membrane reinforced with glass fibre matt	sqm	₹ 240.00
17006	Geotextile 120 grams per sqm non-woven membrane, 100% polyester of thickness 1 to 1.25mm	sqm	₹ 55.00
17007	APP modified 3mm thick membrane reinforced with non-woven polyester matt	sqm	₹ 245.00
17009	Bitumen felt as per IS 7193 Grade II	sqm	₹ 95.00
17010	Kota stone slab 25mm thick (rough chiseled)	Sqm	₹ 300.00
17011	Fibre glass tissue reinforcement Type II Grade I	sqm	₹ 105.00
17012	Water stops serrated with central bulb (225mm wide, 8-11 mm thick)	metre	₹ 255.00
17013	Water stops dumb bell with central bulb	metre	₹ 200.00
17014	Kickers	metre	₹ 235.00
17015	APP modified polymeric felt (two layers) 1.5mm thick	sqm	₹ 90.00
17016	APP modified polymeric felt (two layers) 2mm thick	sqm	₹ 120.00
17017	Bitumen primer for bitumen membrane	litre	₹ 110.00
17018	Polymer modified cementation coating	kg	₹ 170.00
17019	Fibre glass cloth	sqm	₹ 55.00
17020	Fibre reinforced elastomeric liquid waterproofing membrane	litre	₹ 240.00
17021	Integral Crystalline Slurry	kg	₹ 325.00
17022	Crystalline Mortar	kg	₹ 300.00
17023	Swellable type water stop tape (Crystalline sealing compound)	metre	₹ 500.00
17024	Swellable type water stop primer	litre	₹ 2,100.00
17025	Cementious water proofing coating with elastic polymers	kg	₹ 225.00
17026	Chemical Rust Remover	litre	₹ 240.00
17027	Epoxy	kg	₹ 660.00
17028	SBR Polymer	kg	₹ 215.00
17029	Wooven PVC cloth	sqm	₹ 30.00

Code No.	Description	Unit	Rate
17030	Hard drawn steel wire fabric size 75 x 25 mm mesh of weight not less than 7.75 kg/sqm	sqm	₹ 480.00
17031	Adhesive chemical	ml	₹ 3.00
17032	Bit of drilling machine for Hole upto 30mm dia	each	₹ 570.00
17033	GI injection nipple 12mm dia, 75mm long	each	₹ 50.00
17034	Blowing compressed air for cleaning holes upto 30mm dia	each	₹ 12.00
17035	L shaped 100mm long, 10mm dia mild steel shear key	kg	₹ 80.00
17036	Acrylic Polymer chemical for cracks	kg	₹ 35.00
18001	C.I. bracket for wash basin and sinks	pair	₹ 85.00
18002	C.P.brass chain with 40 mm dia rubber plug	each	₹ 42.00
18003	Clamps and M.S. stays including bolts and nuts for 100 mm pipe	each	₹ 40.00
18004	M.S.Holder bat clamp of approved design for 100 mm S.C.I. pipe	each	₹ 30.00
18005	M.S.Holder bat clamp of approved design for 75 mm S.C.I. pipe	each	₹ 27.00
18006	Clamps and M.S. stays including bolts and nuts for 50 mm pipe	each	₹ 35.00
18007	Clamps and M.S. stays including bolts and nuts for 75 mm pipe	each	₹ 38.00
18008	Brass stop-cock 15 mm dia	each	
18009	Mosquito proof coupling of approved design	each	₹ 35.00
18010	Vitreous china foot rests 250x130x30 mm	pair	₹ 100.00
18011	S.C.I. gully or nahani grating 100 mm dia	each	₹ 20.00
18012	Rubber insertions for 80 mm dia pipe joints	each	₹ 15.00
18013	Rubber insertions for 100 mm dia pipe joints	each	₹ 20.00
18014	Rubber insertions for 125 mm dia pipe joints	each	₹ 22.00
18015	Mirror of superior make glass 60x45 cm	each	₹ 370.00
18016	Vitreous china pedestal for wash basin	each	₹ 600.00
18017	Pig lead	kilogram	₹ 150.00
18018	Flush pipe with union spreaders and clamps all in C.P. brass for single stall	each	₹ 250.00
18019	Flush pipe with union spreaders and clamps all in C.P. brass for double stall	each	₹ 420.00
18020	Flush pipe with union spreaders and clamps all in C.P. brass for range of three stall	each	₹ 500.00
18021	Flush pipe with union spreaders and clamps all in C.P. brass for range of four stall	each	₹ 570.00
18022	Flush pipe and spreaders G.I.for single set of one squatting plate urinal	each	₹ 160.00
18023	Flush pipe and spreaders G.I.for range of two squatting plates urinal	each	₹ 250.00
18024	Flush pipe and spreaders G.I.for range of three squatting plates urinal	each	₹ 300.00
18025	Flush pipe and spreaders G.I.for range of four squatting plates urinal	each	₹ 380.00
18026	G.I. inlet connection	each	₹ 80.00
18027	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 75 mm dia	each	₹ 800.00
18028	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 100mm dia	each	₹ 1,000.00

Code No.	Description	Unit	Rate
18029	S.C.I. plain bend 75mm dia	each	₹ 180.00
18030	S.C.I. plain bend 100mm dia	each	₹ 240.00
18031	S.C.I. bend with access door 75mm dia	each	₹ 170.00
18032	S.C.I. bend with access door 100mm dia	each	₹ 240.00
18033	S.C.I. plain single equal junctions 75x75x75 mm dia	each	₹ 260.00
18034	S.C.I. plain single equal junctions 100x100x100 mm dia	each	₹ 360.00
18035	S.C.I. single equal junctions 75x75x75 mm dia with access door.	each	₹ 275.00
18036	S.C.I. single equal junctions 100x100x100 mm dia with access door.	each	₹ 375.00
18037	S.C.I. plain double equal junctions 75x75x75x75 mm dia	each	₹ 420.00
18038	S.C.I. plain double equal junctions 100x100x100x100 mm dia	each	₹ 550.00
18039	S.C.I. double equal junctions 75x75x75x75 mm dia with access door.	each	₹ 430.00
18040	S.C.I. double equal junctions 100x100x100x100 mm dia with access door.	each	₹ 550.00
18041	Slotted cowl (terminal guard) 75 mm dia	each	₹ 110.00
18042	Slotted cowl (terminal guard) 100 mm dia	each	₹ 160.00
18043	Sand cast iron S&S plain single unequal junctions : 100x100x75 mm dia	each	₹ 380.00
18044	Sand cast iron S&S single unequal junctions: 100x100x75 mm dia with access door.	each	₹ 400.00
18045	Sand cast iron S&S plain double unequal junctions : 100x100x75x75 mm dia	each	₹ 500.00
18046	Sand cast iron S&S double unequal junctions: 100x100x75x75 mm dia with access door.	each	₹ 550.00
18047	Sand cast iron heel rest bend 75mm dia	each	₹ 230.00
18048	Sand cast iron heel rest bend 100mm dia	each	₹ 270.00
18049	S.C.I. single equal invert branch of required degree 75x75x75 mm dia	each	₹ 320.00
18050	S.C.I. single equal invert branch of required degree 100x100x100 mm dia	each	₹ 430.00
18051	S.C.I. double equal invert branch of required degree 75x75x75x75 mm dia	each	₹ 420.00
18052	S.C.I. double equal invert branch of required degree 100x100x100x100 mm dia	each	₹ 570.00
18053	S.C.I. single unequal invert branch of required degree 100x100x75 mm dia	each	₹ 510.00
18054	S.C.I. double unequal invert branch of required degree 100x100x75x75 mm dia	each	₹ 600.00
18055	S.C.I. door pieces 75 mm dia	each	₹ 280.00
18056	S.C.I. door pieces 100 mm dia	each	₹ 340.00
18057	S.C.I. collar 75 mm dia	each	₹ 120.00
18058	S.C.I. collar 100 mm dia	each	₹ 160.00
18059	Fire clay kitchen sink: 600x450x250 mm	each	₹ 1,300.00
18060	White vitreous china laboratory sink 450x300x150 mm	each	₹ 750.00
18061	White vitreous china laboratory sink 600x450x200 mm	each	₹ 1,450.00

Code No.	Description	Unit	Rate
18062	White plastic seat (solid)with lid C.P.brass hinges and rubber buffers	each	₹ 340.00
18063	Black plastic seat (solid) with lid C.P.brass hinges and rubber buffers	each	₹ 300.00
18064	Spun yarn	kilogram	₹ 45.00
18065	15 mm C.P.brass tap	each	₹ 250.00
18066	C.P.brass toilet paper holder of standard size	each	₹ 200.00
18067	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P.brass: 50 mm dia	each	₹ 160.00
18068	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P.brass: 80 mm dia	each	₹ 210.00
18069	C.P.brass trap40 mm dia	each	₹ 135.00
18070	100 mm S.C.I. trap with vent heel	each	₹ 340.00
18071	100 mm S.C.I. trap with 100 mm inlet and 100 mm outlet	each	₹ 290.00
18072	100 mm S.C.I. trap with 100 mm inlet and75 mm outlet	each	₹ 210.00
18073	Vitreous china lipped front urinal	each	₹ 450.00
18074	Vitreous china squatting plate urinal	each	₹ 700.00
18075	Vitreous china flat back wash basin 630x450 mm	each	₹ 650.00
18076	Vitreous china angle back wash basin 600x480 mm	each	₹ 680.00
18077	Vitreous china angle back wash basin 400x400 mm	each	₹ 350.00
18078	C.P. brass waste 32 mm	each	₹ 75.00
18079	C.P. brass waste 40 mm	each	₹ 85.00
18080	Vitreous china Indian type w.c. pan size 580 mm	each	₹ 420.00
18081	Vitreous china orrisa type w.c. pan size 580 mm	each	₹ 750.00
18082	Vitreous china pedestal type water closet	each	₹ 700.00
18083	White vitreous china dual purpose closet (Anglo Indian W.C.) suitable for use as squatting pan or European type water closet as per manufacturer's specifications	each	₹ 1,400.00
18084	Vitreous china foot rests 250x125x25 mm	pair	₹ 95.00
18085	Vitreous china Surgeon type wash basin of size 660x460 mm	each	₹ 900.00
18086	600x120 mm glass shelf with anodised aluminium angle frame, C.P.brass brackets and guard rail of standard size	each	₹ 150.00
18087	Vitreous china flat back wash basin 550x400 mm	each	₹ 550.00
18088	C.P. Brass union 40 mm dia	each	₹ 180.00
18089	C.C.I.(spun) socketed soil, waste and vent pipe 1.80 metres long:100mm dia	each	₹ 1,150.00
18090	C.C.I.(spun) socketed soil, waste and vent pipe 1.80 metres long:75mm dia	each	₹ 1,000.00
18091	S.C.I. S&S bends with access door100mm dia	each	₹ 270.00
18092	S.C.I. S&S bends with access door75mm dia	each	₹ 230.00
18093	S.C.I. S&S bend100mm dia	each	₹ 250.00

Code No.	Description	Unit	Rate
18094	S.C.I. S&S bend 75mm dia	each	₹ 190.00
18095	S.C.I. S&S heel rest sanitary bend 100mm dia	each	₹ 300.00
18096	S.C.I. S&S heel rest sanitary bend 75mm dia	each	₹ 260.00
18097	S.C.I. S&S single equal junctions 100x100x100 mm	each	₹ 500.00
18098	S.C.I. S&S single equal junctions 75x75x75 mm	each	₹ 390.00
18099	S.C.I. S&S single equal junctions with access door 100x100x100 mm	each	₹ 500.00
18100	S.C.I. S&S single equal junctions with access door 75x75x75 mm	each	₹ 370.00
18101	S.C.I. S&S double equal junctions 100x100x100x100 mm	each	₹ 620.00
18102	S.C.I. S&S double equal junctions 75x75x75x75 mm	each	₹ 500.00
18103	S.C.I. S&S double equal junctions with access door 100x100x100x100 mm.	each	₹ 620.00
18104	S.C.I. S&S double equal junctions with access door 75x75x75x75 mm.	each	₹ 480.00
18105	S.C.I. S&S single unequal junctions 100x100x75 mm	each	₹ 600.00
18106	S.C.I. S&S single unequal junctions with access door 100x100x75 mm	each	₹ 650.00
18107	S.C.I. S&S double unequal junctions 100x100x75x75 mm	each	₹ 880.00
18108	S.C.I. S&S double unequal junctions with access door 100x100x75x75 mm	each	₹ 775.00
18109	S.C.I. S&S single equal invert branch of required degree 100x100x100 mm dia	each	₹ 440.00
18110	S.C.I. S&S single equal invert branch of required degree 75x75x75 mm dia	each	₹ 350.00
18111	S.C.I. S&S double equal invert branch of required degree 100x100x100x100 mm dia	each	₹ 580.00
18112	S.C.I. S&S double equal invert branch of required degree 75x75x75x75 mm dia	each	₹ 460.00
18113	S.C.I. S&S single unequal invert branch of required degree 100x100x75 mm dia	each	₹ 590.00
18114	S.C.I. S&S double unequal invert branch of required degree 100x100x75x75 mm dia	each	₹ 800.00
18115	S.C.I. S&S, 75 mm offset for 75 mm dia pipe	each	₹ 250.00
18116	S.C.I. S&S, 150 mm offset for 75 mm dia pipe	each	₹ 310.00
18117	S.C.I. S&S, 150 mm offset for 100 mm dia pipe	each	₹ 420.00
18118	S.C.I. S&S, 114 mm offset for 75 mm dia pipe	each	₹ 305.00
18119	S.C.I. S&S, 114 mm offset for 100 mm dia pipe	each	₹ 400.00
18120	S.C.I. S&S, 152 mm offset for 75 mm dia pipe	each	₹ 390.00
18121	S.C.I. S&S, 152 mm offset for 100 mm dia pipe	each	₹ 490.00
18122	S.C.I. S&S door pieces 100 mm dia	each	₹ 320.00
18123	S.C.I. S&S door pieces 75 mm dia	each	₹ 240.00
18124	S.C.I. S&S, Slotted Cowl (Terminal Guard) 100 mm	each	₹ 210.00
18125	S.C.I. S&S, Slotted Cowl (Terminal Guard) 75 mm	each	₹ 200.00
18126	S.C.I. S&S, collars 100 mm	each	₹ 200.00
18127	S.C.I. S&S, collars 75 mm	each	₹ 175.00

Code No.	Description	Unit	Rate
18128	S.C.I. S&S, 76 mm offset for 75 mm dia pipe	each	₹ 175.00
18129	S.C.I. S&S, 76 mm offset for 100 mm dia pipe	each	₹ 300.00
18130	Vitreous china toilet paper holder of standard size	each	₹ 155.00
18131	Red oxide Zinc chromate primer	litre	₹ 85.00
18132	Vitreous china flat back wash basin 450x300 mm	each	₹ 380.00
18133	Vitreous china 10 litres low level cistern without fittings	each	₹ 1,000.00
18134	Vitreous china 10 litres low level cistern with fittings	each	₹ 1,300.00
18135	Rawl plug 50 mm (designation 10 no.)	each	₹ 7.00
18136	Stainless steel kitchen sink - with drain board bowl depth 250 mm.	each	₹ 3,000.00
18137	Stainless steel kitchen sink - with drain board 510 x 1040mm bowl depth 225 mm.	each	₹ 2,700.00
18138	Stainless steel kitchen sink - with drain board 510 x 1040mm bowl depth 200 mm.	each	₹ 2,500.00
18139	Stainless steel kitchen sink - with drain board 510x1040mm bowl depth 178 mm	each	₹ 2,250.00
18140	Stainless steel kitchen sink - without drain board 610x510mm bowl depth 200 mm	each	₹ 1,900.00
18141	Stainless steel kitchen sink - without drain board 610x460mm bowl depth 200 mm.	each	₹ 1,800.00
18142	Stainless steel kitchen sink - without drain board 470x420mm bowl depth 178 mm	each	₹ 1,600.00
18143	Coloured Orissa pattern W.C. pan 580x440 mm	each	₹ 950.00
18144	Coloured Pedestal type W.C. pan 580x440 mm (European type)	each	₹ 900.00
18145	Coloured Vitreous china 10 lit. low level cistern	each	₹ 1,200.00
18146	Coloured (other than black) solid P.V.C. seat in European W.C. pan	each	₹ 390.00
18147	Circular shape 450 mm dia Mirror with Plastic moulded frame	each	₹ 400.00
18148	Rectangular shape 453x357 mm Mirror with Plastic moulded frame	each	₹ 320.00
18149	Oval shape 450x350 mm (outer dimensions) Mirror with Plastic moulded frame	each	₹ 380.00
18150	Rectangular shape 1500x450 mm Mirror with Plastic moulded frame	each	₹ 750.00
18151	Hard board 6 mm thick	sqm	₹ 200.00
18152	Semi Rigid PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	₹ 22.00
18153	Semi Rigid PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	₹ 31.00
18154	Flexible (coil shaped) PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	₹ 32.00
18155	Flexible (coil shaped) PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	₹ 35.00

Code No.	Description	Unit	Rate
18156	Coloured High density polyethylene/ polypropylene 10 lit. (full flush) capacity controlled low level flushing cistern with fittings	each	₹ 750.00
18157	White Vitreous china 10 lit. (full flush) capacity controlled low level flushing cistern with all fittings	each	₹ 1,020.00
18158	Coloured Vitreous china 10 lit. (full flush) capacity controlled low level flushing cistern with all fittings	each	₹ 1,350.00
18159	Flushing Cistern P.V.C. 10 lts capacity (low level) (White) (with fittings, accessories and flush pipe)	each	₹ 650.00
18160	P.V.C. automatic flushing cistern 5 lts capacity	each	₹ 500.00
18161	P.V.C. automatic flushing cistern 10 lts capacity	each	₹ 520.00
18162	15 mm C.P. brass tap with elbow operation lever	each	₹ 550.00
18163	White glazed fire clay draining board 600x450x25 mm	each	₹ 580.00
18164	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Single lipped urinal	each	₹ 480.00
18165	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of two lipped urinals	each	₹ 1,200.00
18166	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of three lipped urinals	each	₹ 1,500.00
18167	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of four lipped urinals	each	₹ 2,200.00
18168	White vitreous china clay half stall urinal flat back 580x380x350 mm or angle back 450x375x350 mm with waste fittings as per IS : 2556	each	₹ 1,450.00
18169	Wedge expansion hold fastener 1/4" or 6 mm	each	₹ 15.00
18170	PTMT Waste Coupling 31/32MM	each	₹ 60.00
18171	PTMT Waste Coupling 38/40MM	each	₹ 85.00
18172	PTMT Bottle Trap 31/32MM	each	₹ 350.00
18173	PTMT Bottle Trap 38/40MM	each	₹ 370.00
18174	PTMT Liquid Soap Container of 400ml capacity	each	₹ 170.00
18175	PTMT Towel Ring 215xd200x37mm	each	₹ 135.00
18176	PTMT Towel Rail (450MM)	each	₹ 240.00
18177	PTMT Towel Rail (600MM)	each	₹ 285.00
18178	PTMT Shelf 450x124x36mm	each	₹ 300.00
18179	PTMT Urinal Spreader 15MM	each	₹ 155.00
18180	Salem Stainless steel AISI - 304 (18/8) Orrisa pattern W.C. pan 724 mm x 578 mm	each	₹ 3,500.00
18181	Salem Stainless steel AISI - 304 (18/8) Round basin 405mm X 355 mm	each	₹ 1,800.00
18182	Salem Stainless steel AISI - 304 (18/8) Wash basin 530mm X 345mm	each	₹ 1,680.00
18183	Centrifugally cast (spun) iron S&S 100 mm inlet and 100 mm outlet	each	₹ 420.00
18184	Centrifugally cast (spun) iron S&S 100 mm inlet and 75 mm outlet	each	₹ 450.00

Code No.	Description	Unit	Rate
18185	P.T.M.T. Urinal cock 15mm dia	each	₹ 120.00
18186	Wall mounted water closet of size 780x370x690 mm	each	₹ 4,650.00
18187	Adjustable Vitreous China Cistern with fittings of flushing capacity 3litre/6 litre (adjustable to 4 litre/8 litre)	each	₹ 2,000.00
18188	White Vitreous China Waterless Urinal of size 600 x 330x315 mm	each	₹ 10,200.00
18189	Cistern with fittings for Waterless Urinal	each	₹ 2,400.00
18190	Battery based infrared sensor operated White Vitreous Urinal of approx size 610 x 390 x 370 mm	each	₹ 4,000.00
18191	Floor mounted white vitrous china double trap syphonic WC with 10 litre cistern and all fittings & fixtures,seat cover etc	each	₹ 9,000.00
18192	u-PVC double equal junction of required degree without door 75x75x75 x 75 mm	each	₹ 60.00
18193	u-PVC double equal junction of required degree without door 110x110x110 x110 mm	each	₹ 90.00
18194	u-PVC double equal junction of required degree with door 75x75x75 x 75 mm	each	₹ 85.00
18195	u-PVC double equal junction of required degree with door 110x110x110 x110 mm	each	₹ 120.00
18196	u-PVC double unequal junction of required degree without door 110x110x75 x 75 mm	each	₹ 150.00
18197	u-PVC double unequal junction of required degree with door 110x110x75 x 75 mm	each	₹ 180.00
18198	u-PVC single unequal junction of required degree without door 110x110x75 mm	each	₹ 125.00
18199	u-PVC single unequal junction of required degree with door 110x110x75 mm	each	₹ 150.00
181200	u- PVC Single socketed pipe - 110 mm OD working pressure 6 kg / cm ²	metre	₹ 190.00
19001	Bleaching powder	quintal	₹ 2,400.00
19002	Surface box for stop cock	each	₹ 130.00
19003	Surface box for sluice valve	each	₹ 210.00
19004	Surface box for water meter	each	₹ 260.00
19005	Brass bib-cock 15 mm dia	each	₹ 215.00
19006	Brass bib-cock 20 mm dia	each	₹ 265.00
19007	Brass stop-cock 15 mm dia	each	₹ 225.00
19008	Brass stop-cock 20 mm dia	each	₹ 320.00
19009	C.I.mouth, brass ferrule 15 mm dia	each	₹ 140.00
19010	C.I.mouth, brass ferrule 20 mm dia	each	₹ 165.00
19011	C.I.mouth, brass ferrule 25 mm dia	each	₹ 228.00
19012	Rubber insertions for 80 mm dia pipe joints	each	₹ 13.00
19013	Rubber insertions for 100 mm dia pipe joints	each	₹ 17.00
19014	Rubber insertions for 125 mm dia pipe joints	each	₹ 19.00
19015	Rubber insertions for 150 mm dia pipe joints	each	₹ 22.00
19016	Rubber insertions for 200 mm dia pipe joints	each	₹ 29.00
19017	Rubber insertions for 250 mm dia pipe joints	each	₹ 44.00
19018	Rubber insertions for 300 mm dia pipe joints	each	₹ 55.00
19019	Rubber insertions for 350 mm dia pipe joints	each	₹ 66.00
19020	Rubber insertions for 400 mm dia pipe joints	each	₹ 96.00

Code No.	Description	Unit	Rate
19021	Rubber insertions for 450 mm dia pipe joints	each	₹ 120.00
19022	Rubber insertions for 500 mm dia pipe joints	each	₹ 154.00
19023	Rubber insertions for 600 mm dia pipe joints	each	₹ 171.00
19024	S & S.C.I. standard specials up to 300 mm dia (heavy class)	quintal	₹ 3,600.00
19025	S & S.C.I. standard specials over 300 mm dia (heavy class)	quintal	₹ 3,700.00
19026	Flanged C.I. standard specials up to 300 mm dia (heavy class)	quintal	₹ 5,800.00
19027	Flanged C.I. standard specials over 300 mm dia (heavy class)	quintal	₹ 6,200.00
19028	G.I. pipes 15 mm dia	metre	₹ 90.00
19029	G.I. pipes 20 mm dia	metre	₹ 120.00
19030	G.I. pipes 25 mm dia	metre	₹ 150.00
19031	G.I. pipes 32 mm dia	metre	₹ 210.00
19032	G.I. pipes 40 mm dia	metre	₹ 240.00
19033	G.I. pipes 50 mm dia	metre	₹ 340.00
19034	G.I. pipes 65 mm dia	metre	₹ 405.00
19035	G.I. pipes 80 mm dia	metre	₹ 515.00
19036	G.I. back (jam) nuts 25 mm dia	each	₹ 8.00
19037	G.I. back (jam) nuts 65 mm dia	each	₹ 23.00
19038	G.I. tees (equal) 25 mm	each	₹ 64.00
19039	G.I. tees (equal) 65 mm	each	₹ 280.00
19040	G.I. Union 15 mm nominal bore	each	₹ 48.00
19041	G.I. Union 20 mm nominal bore	each	₹ 64.00
19042	G.I. Union 25 mm nominal bore	each	₹ 80.00
19043	G.I. Union 32 mm nominal bore	each	₹ 127.00
19044	G.I. Union 40 mm nominal bore	each	₹ 180.00
19045	G.I. Union 50 mm nominal bore	each	₹ 239.00
19046	G.I. Union 65 mm nominal bore	each	₹ 420.00
19047	G.I. Union 80 mm nominal bore	each	₹ 500.00
19048	Polyethylene water storage tank with cover and suitable locking arrangement	per litre	₹ 7.25
19049	Unplasticised P.V.C. connection pipe with brass union 30 cm long 15 mm bore	each	₹ 35.00
19050	Unplasticised P.V.C. connection pipe with brass union 30 cm long 20 mm bore	each	₹ 50.00
19051	Unplasticised P.V.C. connection pipe with brass union 45 cm long 15 mm bore	each	₹ 50.00
19052	Unplasticised P.V.C. connection pipe with brass union 45 cm long 20 mm bore	each	₹ 70.00
19053	S.C.I. hand pump	each	₹ 750.00
19054	Shower rose C.P. brass for 15 to 20 mm inlet 100 mm dia	each	₹ 70.00
19055	Shower rose C.P. brass for 15 to 20 mm inlet 150 mm dia	each	₹ 100.00
19056	Spun yarn	kilogram	₹ 43.00
19057	Strainer brass 40 mm dia 1.5 metre long	each	₹ 580.00
19058	H.P. or L.P. ball valve with polythene floats: 15 mm dia	each	₹ 250.00
19059	H.P. or L.P. ball valve with polythene floats: 20 mm dia	each	₹ 372.00
19060	H.P. or L.P. ball valve with polythene floats: 25 mm dia	each	₹ 430.00
19061	Brass full way valve with C.I. wheel (screwed end) 25 mm dia	each	₹ 336.00

Code No.	Description	Unit	Rate
19062	Brass full way valve with C.I. wheel (screwed end) 32 mm dia	each	₹ 424.00
19063	Brass full way valve with C.I. wheel (screwed end) 40 mm dia	each	₹ 473.00
19064	Brass full way valve with C.I. wheel (screwed end) 50 mm dia	each	₹ 691.00
19065	Brass full way valve with C.I. wheel (screwed end) 65 mm dia	each	₹ 1,002.00
19066	Brass full way valve with C.I. wheel (screwed end) 80 mm dia	each	₹ 1,660.00
19067	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	₹ 340.00
19068	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	₹ 437.00
19069	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	₹ 587.00
19070	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	₹ 884.00
19071	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	₹ 1,553.00
19072	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	₹ 2,204.00
19073	C.I.sluiice valve (with caps) class I : 100 mm dia	each	₹ 2,705.00
19074	C.I.sluiice valve (with caps) class I : 125 mm dia	each	₹ 3,385.00
19075	C.I.sluiice valve (with caps) class I : 150 mm dia	each	₹ 4,064.00
19076	C.I.sluiice valve (with caps) class I : 200 mm dia	each	₹ 7,735.00
19077	C.I.sluiice valve (with caps) class I : 250 mm dia	each	₹ 11,520.00
19078	C.I.sluiice valve (with caps) class I : 300 mm dia	each	₹ 14,196.00
19079	Bolts and nuts 16 mm dia 60 mm long	each	₹ 12.00
19080	Bolts and nuts 16 mm dia 65 mm long	each	₹ 12.00
19081	Bolts and nuts 20 mm dia 65 mm long	each	₹ 17.00
19082	Bolts and nuts 20 mm dia 70 mm long	each	₹ 17.00
19083	Bolts and nuts 20 mm dia 75 mm long	each	₹ 17.00
19084	Bolts and nuts 20 mm dia 80 mm long	each	₹ 19.00
19085	Bolts and nuts 24 mm dia 85 mm long	each	₹ 34.00
19086	Bolts and nuts 24 mm dia 90 mm long	each	₹ 37.00
19087	Bolts and nuts 27 mm dia 100 mm long	each	₹ 43.00
19088	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	₹ 372.00
19089	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	₹ 551.00
19090	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	₹ 723.00
19091	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	₹ 1,019.00
19092	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	₹ 1,782.00
19093	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	₹ 2,332.00
19094	C.I.sluiice valve (with caps) class II : 100 mm dia	each	₹ 2,791.00
19095	C.I.sluiice valve (with caps) class II : 125 mm dia	each	₹ 3,528.00
19096	C.I.sluiice valve (with caps) class II : 150 mm dia	each	₹ 4,293.00
19097	C.I.sluiice valve (with caps) class II : 200 mm dia	each	₹ 8,300.00
19098	C.I.sluiice valve (with caps) class II : 250 mm dia	each	₹ 11,734.00
19099	C.I.sluiice valve (with caps) class II : 300 mm dia	each	₹ 14,668.00
19100	C.P. Brass bib cock 15 mm	each	₹ 380.00
19101	C.P. Brass long nose bibcock 15 mm	each	₹ 350.00

Code No.	Description	Unit	Rate
19102	C.P. Brass long body bibcock 15 mm	each	₹ 400.00
19103	C.P. Brass stop cock (concealed) 15 mm	each	₹ 430.00
19104	C.P. Brass angle valve 15 mm	each	₹ 390.00
19105	15 mm PTMT bib cock	each	₹ 100.00
19106	15 mm PTMT bib cock with flange (fancy)	each	₹ 155.00
19107	15 mm PTMT bib cock long body with flange	each	₹ 155.00
19108	15 mm dia PTMT stop cock(male thread)	each	₹ 100.00
19109	20 mm dia. PTMT stop cock	each	₹ 135.00
19110	PTMT pillar cock	each	₹ 145.00
19111	PTMT push cock 15 mm dia.	each	₹ 90.00
19112	PTMT push cock 12 mm dia. 20 mm BSP	each	₹ 82.00
19113	PTMT grating 100 mm dia.	each	₹ 26.00
19114	PTMT grating 75 mm dia.	each	₹ 34.00
19115	125 mm grating with waste hole	each	₹ 35.00
19116	Rectangular type with openable circular lid 150 mm size 18 mm high with 100 mm dia. (110 gm)	each	₹ 125.00
19117	Double acting air valve 50 mm	each	₹ 4,000.00
19118	Double acting air valve 80 mm	each	₹ 5,000.00
19119	Double acting air valve 100 mm	each	₹ 6,500.00
19120	Water meter (including testing charges) 80 mm	each	₹ 2,400.00
19121	Water meter (including testing charges) 100 mm	each	₹ 3,500.00
19122	Water meter (including testing charges) 150 mm	each	₹ 5,000.00
19123	Water meter (including testing charges) 200 mm	each	₹ 5,800.00
19124	Dirt box strainer 80 mm	each	₹ 2,800.00
19125	Dirt box strainer 100 mm	each	₹ 4,600.00
19126	Dirt box strainer 150 mm	each	₹ 5,600.00
19127	Dirt box strainer 200 mm	each	₹ 8,400.00
19128	PTMT Ball Cock 15mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 120.00
19129	PTMT Ball Cock 20mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 175.00
19130	PTMT Ball Cock 25mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 340.00
19131	PTMT Ball Cock 40mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 560.00
19132	PTMT Ball Cock 50mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 1,010.00
19133	PTMT Angle Stop cock with Flange 15mm	Each	₹ 110.00
19134	PTMT Swiveling shower 15mm	Each	₹ 80.00
19135	PTMT Soap Dish/Holder 138x102x75mm	Each	₹ 90.00
19136	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 100mm dia	metre	₹ 880.00
19137	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 150mm dia	metre	₹ 1,300.00
19138	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 200mm dia	metre	₹ 1,800.00
19139	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 250mm dia	metre	₹ 2,300.00
19140	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 300mm dia	metre	₹ 2,950.00
19141	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 350mm dia	metre	₹ 3,450.00
19142	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 400mm dia	metre	₹ 5,000.00
19143	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 450mm dia	metre	₹ 5,500.00

Code No.	Description	Unit	Rate
19144	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 500mm dia	metre	₹ 7,200.00
19145	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 600mm dia	metre	₹ 8,100.00
19146	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 700mm dia	metre	₹ 11,250.00
19147	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 750mm dia	metre	₹ 12,900.00
19148	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 800mm dia	metre	₹ 13,150.00
19149	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 900mm dia	metre	₹ 15,400.00
19150	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 1000mm dia	metre	₹ 17,300.00
19151	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 100mm dia	Each	₹ 30.00
19152	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 150mm dia	Each	₹ 35.00
19153	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 200mm dia	Each	₹ 60.00
19154	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 250mm dia	Each	₹ 70.00
19155	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 300mm dia	Each	₹ 125.00
19156	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 350mm dia	Each	₹ 130.00
19157	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 400mm dia	Each	₹ 250.00
19158	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 450mm dia	Each	₹ 270.00
19159	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 500mm dia	Each	₹ 300.00
19160	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 600mm dia	Each	₹ 375.00
19161	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 650mm dia	Each	₹ 575.00
19162	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 700mm dia	Each	₹ 700.00
19163	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 800mm dia	Each	₹ 750.00
19164	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 900mm dia	Each	₹ 990.00
19165	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 1000mm dia	Each	₹ 1,180.00
19166	Ductile Iron K - 12 specials suitable for push on jointing up to 600mm dia	Quintal	₹ 12,000.00
19167	Ductile Iron K - 12 specials suitable for push on jointing over 600mm dia	Quintal	₹ 18,000.00
19168	Ductile Iron specials suitable for mechanical jointing as per I.S. 9523 -up to 600mm dia	Quintal	₹ 13,451.00
19169	Ductile Iron Specials suitable for mechanical jointing as per I.S. 9523 over 600mm dia	Quintal	₹ 19,600.00
19170	Ductile Iron Pipe Class K-9 flanges and welding 100mm dia	metre	₹ 1,275.00
19171	Ductile Iron Pipe Class K-9 flanges and welding 150 dia	metre	₹ 1,764.00

Code No.	Description	Unit	Rate
19172	Ductile Iron Pipe Class K-9 flanges and welding 200mm dia	metre	₹ 2,287.00
19173	Ductile Iron Pipe Class K-9 flanges and welding 250mm dia	metre	₹ 3,200.00
19174	Ductile Iron Pipe Class K-9 flanges and welding 300mm dia	metre	₹ 4,100.00
19175	Ductile Iron Pipe Class K-9 flanges and welding 350mm dia	metre	₹ 5,000.00
19176	Ductile Iron Pipe Class K-9 flanges and welding 400mm dia	metre	₹ 6,550.00
19177	Ductile Iron Pipe Class K-9 flanges and welding 450mm dia	metre	₹ 7,100.00
19178	Ductile Iron Pipe Class K-9 flanges and welding 500mm dia	metre	₹ 9,900.00
19179	Ductile Iron Pipe Class K-9 flanges and welding 600mm dia	metre	₹ 12,800.00
19180	Ductile Iron Pipe Class K-9 flanges and welding 700mm dia	metre	₹ 15,800.00
19181	S&S Centrifugally (Spun) C.I. Pipe class LA 100mm dia	metre	₹ 900.00
19182	S&S Centrifugally (Spun) C.I. Pipe class LA 125mm dia	metre	₹ 1,200.00
19183	S&S Centrifugally (Spun) C.I. Pipe class LA 150mm dia	metre	₹ 1,450.00
19184	S&S Centrifugally (Spun) C.I. Pipe class LA 200mm dia	metre	₹ 2,400.00
19185	S&S Centrifugally (Spun) C.I. Pipe class LA 250mm dia	metre	₹ 3,000.00
19186	S&S Centrifugally (Spun) C.I. Pipe class LA 300mm dia	metre	₹ 4,100.00
19187	S&S Centrifugally (Spun) C.I. Pipe class LA 350mm dia	metre	₹ 4,950.00
19188	S&S Centrifugally (Spun) C.I. Pipe class LA 400mm dia	metre	₹ 6,500.00
19189	S&S Centrifugally (Spun) C.I. Pipe class LA 450mm dia	metre	₹ 7,900.00
19190	S&S Centrifugally (Spun) C.I. Pipe class LA 500mm dia	metre	₹ 9,100.00
19191	S&S Centrifugally (Spun) C.I. Pipe class LA 600mm dia	metre	₹ 12,800.00
19192	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing up to 300mm dia for lead jointing up to 300mm dia	Quintal	₹ 5,150.00
19193	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing over 300mm dia	Quintal	₹ 6,250.00
19194	S&S Centrifugally (Spun) C.I. Pipe specials suitable for mechanical joint as per I.S. 13382 up to 300mm dia	Quintal	₹ 8,500.00
19195	S&S Centrifugally (Spun) C.I. Pipe Specials suitable for mechanical joint as per IS 13382 over 300mm dia	Quintal	₹ 9,100.00
19196	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 100mm dia	metre	₹ 1,380.00
19197	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 150mm dia	metre	₹ 2,150.00

Code No.	Description	Unit	Rate
19198	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 200mm dia	metre	₹ 3,350.00
19199	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 250mm dia	metre	₹ 4,000.00
19200	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 300mm dia	metre	₹ 5,120.00
19201	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 350mm dia	metre	₹ 6,460.00
19202	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 400mm dia	metre	₹ 8,380.00
19203	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 450mm dia	Metre	₹ 10,700.00
19204	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 500mm dia	metre	₹ 13,500.00
19205	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 600mm dia	metre	₹ 18,400.00
19206	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 100mm dia	metre	₹ 800.00
19207	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 150mm dia	metre	₹ 1,170.00
19208	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 200mm dia	metre	₹ 1,660.00
19209	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 250mm dia	metre	₹ 2,250.00
19210	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 300mm dia	metre	₹ 3,150.00
19211	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 350mm dia	metre	₹ 3,650.00
19212	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 400mm dia	metre	₹ 4,350.00
19213	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 450mm dia	metre	₹ 5,150.00
19214	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 500mm dia	metre	₹ 6,150.00
19215	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 600mm dia	metre	₹ 8,110.00
19216	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 700mm dia	metre	₹ 10,050.00
19217	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 800mm dia	metre	₹ 14,000.00
19218	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 900mm dia	metre	₹ 17,250.00
19219	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 1000mm dia	metre	₹ 20,950.00
19220	P.T.M.T. Bib cock with nozzle 15mm	each	₹ 130.00
19221	P.T.M.T. Stop cock (concealed) 15mm	each	₹ 150.00
19222	15 mm nominal bore and 30 cm length PVC connection pipe with P.T.M.T. Nuts	each	₹ 38.00

Code No.	Description	Unit	Rate
19223	15 mm nominal bore and 45 cm length PVC connection pipe with P.T.M.T. Nuts	each	₹ 40.00
19224	P.T.M.T. extension nipple 15mm	each	₹ 25.00
19225	P.T.M.T. extension nipple 20mm	each	₹ 35.00
19226	P.T.M.T. extension nipple 25mm	each	₹ 45.00
19227	1216 mm PE-AL-PE Composite pressure pipe	metre	₹ 90.00
19228	1620 mm PE-AL-PE Composite pressure pipe	metre	₹ 110.00
19229	2025 mm PE-AL-PE Composite pressure pipe	metre	₹ 140.00
19230	2532 mm PE-AL-PE Composite pressure pipe	metre	₹ 175.00
19231	3240 mm PE-AL-PE Composite pressure pipe	metre	₹ 260.00
19232	4050 mm PE-AL-PE Composite pressure pipe	metre	₹ 350.00
19233	Poly propylene- Random - Co - Polymer (PPR) pipes SDR 7.4 - 16 Outer dia	metre	₹ 38.00
19234	Poly propylene - Random - Co - Polymer (PPR) pipes SDR 7.4 -20mm Outer dia.	metre	₹ 58.00
19235	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 25 mm outer dia.	metre	₹ 75.00
19236	Poly propylene - Random - Co - poymer (PPR) pipes SDR 7.4 -32 mm Outer dia.	metre	₹ 112.00
19237	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -40mm Outer dia.	metre	₹ 150.00
19238	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -50mm Outer dia.	metre	₹ 260.00
19239	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -63mm Outer dia.	metre	₹ 700.00
19240	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -75mm Outer dia.	metre	₹ 790.00
19241	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -90 mm Outer dia.	metre	₹ 950.00
19242	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11 -110mm Outer dia.	metre	₹ 1,050.00
19243	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11-160mm Outer dia.	metre	₹ 1,750.00
19244	Chlorinated Polyvinyl - chloride (CPVC) pipe 15 mm outer dia.	metre	₹ 45.00
19245	Chlorinated Polyvinyl - chloride (CPVC) pipe 20 mm outer dia.	metre	₹ 65.00
19246	Chlorinated Polyvinyl - chloride (CPVC) pipe 25 mm outer dia.	metre	₹ 85.00
19247	Chlorinated Polyvinyl - chloride (CPVC) pipe 32 mm outer dia.	metre	₹ 125.00
19248	Chlorinated Polyvinyl - chloride (CPVC) pipe 40 mm outer dia.	metre	₹ 165.00
19249	Chlorinated Polyvinyl - chloride (CPVC) pipe 50 mm outer dia.	metre	₹ 285.00
19250	Chlorinated Polyvinyl - chloride (CPVC) pipe 62.5mm inner dia.	metre	₹ 720.00
19251	Chlorinated Polyvinyl - chloride (CPVC) pipe 75 mm inner dia.	metre	₹ 820.00
19252	Chlorinated Polyvinyl - chloride (CPVC) pipe 100 mm inner dia.	metre	₹ 1,030.00
19253	Chlorinated Polyvinyl - chloride (CPVC) pipe 150 mm inner dia.	metre	₹ 1,700.00
19254	15 mm Battery Based Sensor Pillar Cock	each	₹ 5,800.00
20001	Rectangular cover 455x610 mm with frame (low duty)	each	₹ 2,000.00

Code No.	Description	Unit	Rate
20002	Rectangular cover 455x610mm without frame (low duty)	each	₹ 1,200.00
20003	500 mm dia cover without frame (medium duty)	each	₹ 3,000.00
20004	R.C.C. pipes NP2 class 100 mm dia	metre	₹ 388.00
20005	R.C.C. pipes NP2 class 150 mm dia	metre	₹ 443.00
20006	R.C.C. pipes NP2 class 250 mm dia	metre	₹ 516.00
20007	R.C.C. pipes NP2 class 300 mm dia	metre	₹ 750.00
20008	R.C.C. pipes NP2 class 450 mm dia	metre	₹ 1,525.00
20009	R.C.C. pipes NP2 class 500 mm dia	metre	₹ 1,624.00
20010	R.C.C. pipes NP2 class 600 mm dia	metre	₹ 2,196.00
20011	R.C.C. pipes NP2 class 700 mm dia	metre	₹ 2,493.00
20012	R.C.C. pipes NP2 class 800 mm dia	metre	₹ 2,899.00
20013	R.C.C. pipes NP2 class 900 mm dia	metre	₹ 3,534.00
20014	R.C.C. pipes NP2 class 1000 mm dia	metre	₹ 4,438.00
20015	R.C.C. pipes NP2 class 1100 mm dia	metre	₹ 5,355.00
20016	R.C.C. pipes NP2 class 1200 mm dia	metre	₹ 5,573.00
20017	R.C.C. collarsNP2 class 100 mm dia	each	₹ 56.00
20018	R.C.C. collarsNP2 class 150 mm dia	each	₹ 72.00
20019	R.C.C. collarsNP2 class 250 mm dia	each	₹ 117.00
20020	R.C.C. collarsNP2 class 300 mm dia	each	₹ 145.00
20021	R.C.C. collarsNP2 class 450 mm dia	each	₹ 353.00
20022	R.C.C. collarsNP2 class 500 mm dia	each	₹ 410.00
20023	R.C.C. collarsNP2 class 600 mm dia	each	₹ 514.00
20024	R.C.C. collarsNP2 class 700 mm dia	each	₹ 521.00
20025	R.C.C. collarsNP2 class 800 mm dia	each	₹ 746.00
20026	R.C.C. collarsNP2 class 900 mm dia	each	₹ 910.00
20027	R.C.C. collarsNP2 class 1000 mm dia	each	₹ 932.00
20028	R.C.C. collarsNP2 class 1100 mm dia	each	₹ 1,069.00
20029	R.C.C. collarsNP2 class 1200 mm dia	each	₹ 1,242.00
20030	Stoneware pipes grade A (60 cm long) 100 mm dia	each	₹ 54.00
20031	Stoneware pipes grade A (60 cm long) 150 mm dia	each	₹ 70.00
20032	Stoneware pipes grade A (60 cm long) 200 mm dia	each	₹ 128.00
20033	Stoneware pipes grade A (60 cm long) 230 mm dia	each	₹ 134.00
20034	Stoneware pipes grade A (60 cm long) 250 mm dia	each	₹ 183.00
20035	Stoneware pipes grade A (60 cm long) 300 mm dia	each	₹ 262.00
20036	Spun yarn	kilogram	₹ 48.00
20037	560 mm dia cover without frame (Heavy duty)	each	₹ 5,908.00
20038	Brick Aggregate (Single size) : 63 mm nominal size	cum	₹ 2,500.00
20039	Brick bats (mix class)	cum	₹ 1,950.00
20040	Brick Aggregate (Single size) : 50 to 80 mm nominal size (mix class)	cum	₹ 2,180.00

Code No.	Description	Unit	Rate
20041	Brick Aggregate (Single size) : 40 mm nominal size (mix class)	cum	₹ 2,240.00
21001	Muli Bamboo 25 mm to 40 mm dia	metre	₹ 4.50
21002	G.I. wire 1.0 mm	kilogram	₹ 58.00
21003	Bamboo dhari mat	sqm	₹ 50.00
21004	Thatch (Sungrass) 300 mm dia. Bundle	bundle	₹ 55.00
21005	Barak bamboo	metre	₹ 20.00

Basic Rates
0.4 CARRIAGE CODES

(Carriage by Mechanical Transport including loading, unloading and stacking)

Note: - These rates are exclusive of contractor's profit and overhead charges.

Code No.	Description	Unit	Rate
0401	A.C.sheet and accessories	tonne	₹ 110.94
0402	Barbed wire	tonne	₹ 110.94
0403	Brick tiles	1000 Nos	₹ 199.69
0404	Brick/ Stone aggregate 40 mm nominal size and above	cum	₹ 172.74
0405	Brick/ Stone aggregate below 40 mm nominal size	cum	₹ 159.75
0406	Bricks	1000 Nos	₹ 332.82
0407	Cast iron fittings	tonne	₹ 110.94
0408	Cast iron pipes 1000 mm dia	100 metre	₹ 9,093.35
0409	Cast iron pipes 150 mm dia	100 metre	₹ 454.67
0410	Cast iron pipes 200 mm dia	100 metre	₹ 737.30
0411	Cast iron pipes 250 mm dia	100 metre	₹ 1,049.23
0412	Cast iron pipes 300 mm dia	100 metre	₹ 1,299.05
0413	Cast iron pipes 350 mm dia	100 metre	₹ 1,818.67
0414	Cast iron pipes 400 mm dia	100 metre	₹ 2,480.01
0415	Cast iron pipes 450 mm dia	100 metre	₹ 3,031.11
0416	Cast iron pipes 500 mm dia	100 metre	₹ 3,031.11
0417	Cast iron pipes 600 mm dia	100 metre	₹ 4,546.68
0418	Cast iron pipes 700 mm dia	100 metre	₹ 4,546.68
0419	Cast iron pipes 800 mm dia	100 metre	₹ 4,546.68
0420	Cast iron pipes 900 mm dia	100 metre	₹ 6,820.02
0421	Cement	tonne	₹ 110.94
0422	Coarse sand	cum	₹ 142.63
0423	Ductile iron pipes (k7) 100 mm dia	100 metre	₹ 272.80
0424	Dump manure	cum	₹ 144.70
0425	Fine Sand	cum	₹ 142.63

Code No.	Description	Unit	Rate
0426	Fly ash	cum	₹ 130.51
0427	G.I. pipes below 100 mm dia	tonne	₹ 110.94
0428	G.I.sheet and accessories	tonne	₹ 110.94
0429	Good earth	cum	₹ 184.90
0430	Lime	cum	₹ 130.51
0431	Marble dust and marble chips	cum	₹ 130.51
0432	Moorum	cum	₹ 130.51
0433	Pig lead	tonne	₹ 110.94
0434	Plaster of paris	tonne	₹ 110.94
0435	R.C.C. pipes 100 mm dia	100 metre	₹ 272.80
0436	R.C.C. pipes 1000 mm dia	100 metre	₹ 9,093.35
0437	R.C.C. pipes 1100 mm dia	100 metre	₹ 9,093.35
0438	R.C.C. pipes 1200 mm dia	100 metre	₹ 9,093.35
0439	R.C.C. pipes 150 mm dia	100 metre	₹ 454.67
0440	R.C.C. pipes 250 mm dia	100 metre	₹ 1,049.23
0441	R.C.C. pipes 300 mm dia	100 metre	₹ 1,299.05
0442	R.C.C. pipes 450 & 500 mm dia	100 metre	₹ 3,031.11
0443	R.C.C. pipes 600, 700, 750 & 800 mm dia	100 metre	₹ 4,546.68
0444	R.C.C. pipes 900 mm dia	100 metre	₹ 6,820.02
0445	Red bajri	cum	₹ 130.51
0446	Rubbish	cum	₹ 130.51
0447	S.W. pipes100 mm dia	100 metre	₹ 170.68
0448	S.W. pipes150 mm dia	100 metre	₹ 332.82
0449	S.W. pipes200 mm dia	100 metre	₹ 554.70
0450	S.W. pipes230 mm dia	100 metre	₹ 792.42
0451	S.W. pipes250 mm dia	100 metre	₹ 950.90
0452	S.W. pipes300 mm dia	100 metre	₹ 1,188.63
0453	Sludge	cum	₹ 144.70
0454	Soling stone & masonry stone	cum	₹ 239.43
0455	Solvent/ Diesel.	quintal	₹ 12.48
0456	Spun iron S & S pipes 100 mm dia	100 metre	₹ 272.80

Code No.	Description	Unit	Rate
0457	Spun iron S & S pipes 125 mm dia	100 metre	₹ 363.73
0458	Spun iron S & S pipes 150 mm dia	100 metre	₹ 454.67
0459	Spun iron S & S pipes 200 mm dia	100 metre	₹ 737.30
0460	Spun iron S & S pipes 250 mm dia	100 metre	₹ 1,049.23
0461	Spun iron S & S pipes 300 mm dia	100 metre	₹ 1,299.05
0462	Spun iron S & S pipes 350 mm dia	100 metre	₹ 1,818.67
0463	Spun iron S & S pipes 400 mm dia	100 metre	₹ 2,480.01
0464	Spun iron S & S pipes 450 mm dia	100 metre	₹ 3,031.11
0465	Spun iron S & S pipes 500 mm dia	100 metre	₹ 3,031.11
0466	Spun iron S & S pipes 600mm dia	100 metre	₹ 4,546.68
0467	Steam coal	tonne	₹ 110.94
0468	Steel	tonne	₹ 110.94
0469	Stone blocks white & red sand stone & kota stone slab	tonne	₹ 110.94
0470	Stone dust	cum	₹ 130.51
0471	Surkhi	cum	₹ 130.51
0472	Tar bitumen	tonne	₹ 110.94
0473	Timber	cum	₹ 80.65

S U B - H E A D - 1



C A R R I A G E O F M A T E R I A L

**SUB HEAD : 1.0 / CARRIAGE OF MATERIALS
BASIC RATES**

Code	Material Name	Unit	Rate
0116	Hire Charges of truck	Day	₹ 2,650.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0224	Mate	Day	₹ 300.00
01001	Diesel	Litre	₹ 54.27
01002	Mobil Oil	Litre	₹ 250.00

SUB HEAD : 1.0
CARRIAGE OF MATERIALS
Data Sheet No 1 for Analysis of Rates

1.1 By Mechanical Transport including loading, unloading and stacking:

Code	Material Name	Unit	Rate
0116	Hire Charges of truck	Day	₹ 2,650.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0224	Mate	Day	₹ 300.00
01001	Diesel	Litre	₹ 54.27
01002	Mobil Oil	Litre	₹ 250.00

Distance/ Lead in km	Average speed	Nos of Trips in 8 Hours shift N=8/ [(2d/S)+1]	Nos of km covered in 8 hrs. shift (2Nd+6)	Diesel consumed @ 5 km/litre	Cost of Diesel @ ` 54.27 per Litre	Mobil oil consumed @ 140 km/litre	Cost of Mobil oil @ ` 250 per Litre	Cost of loading, unloading & stacking 6 nos. Beldars for 8 hours @ `300.00 per day	Hire charges of truck @`2650.00 per day	Total Cost=6+8+9 +10	Cost per Trip '= col. 11/col. 3	Increase in cost per km over previous km	Average cost per additional km after first 5,10 and 20 km
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 km	16.00 kmh ⁻¹	7.11 nos.	20.22 km	4.04 l	₹ 219.25	0.144 l	₹ 36.00	₹ 1,800.00	₹ 2,650.00	₹ 4,705.25	₹ 661.78		
2 km	17.00 kmh ⁻¹	6.48 nos.	31.92 km	6.38 l	₹ 346.24	0.228 l	₹ 57.00	₹ 1,800.00	₹ 2,650.00	₹ 4,853.24	₹ 748.96		
3 km	17.50 kmh ⁻¹	5.96 nos.	41.76 km	8.35 l	₹ 453.15	0.298 l	₹ 74.50	₹ 1,800.00	₹ 2,650.00	₹ 4,977.65	₹ 835.18		
4 km	18.00 kmh ⁻¹	5.54 nos.	50.32 km	10.06 l	₹ 545.96	0.359 l	₹ 89.75	₹ 1,800.00	₹ 2,650.00	₹ 5,085.71	₹ 918.00		
5 km	18.50 kmh ⁻¹	5.19 nos.	57.90 km	11.58 l	₹ 628.45	0.414 l	₹ 103.50	₹ 1,800.00	₹ 2,650.00	₹ 5,181.95	₹ 998.45		
6 km	19.00 kmh ⁻¹	4.90 nos.	64.80 km	12.96 l	₹ 703.34	0.463 l	₹ 115.75	₹ 1,800.00	₹ 2,650.00	₹ 5,269.09	₹ 1,075.32	₹ 76.87	₹ 71.65
7 km	19.50 kmh ⁻¹	4.66 nos.	71.24 km	14.25 l	₹ 773.35	0.509 l	₹ 127.25	₹ 1,800.00	₹ 2,650.00	₹ 5,350.60	₹ 1,148.20	₹ 72.88	
8 km	20.00 kmh ⁻¹	4.44 nos.	77.04 km	15.41 l	₹ 836.30	0.550 l	₹ 137.50	₹ 1,800.00	₹ 2,650.00	₹ 5,423.80	₹ 1,221.58	₹ 73.38	
9 km	20.50 kmh ⁻¹	4.26 nos.	82.68 km	16.54 l	₹ 897.63	0.591 l	₹ 147.75	₹ 1,800.00	₹ 2,650.00	₹ 5,495.38	₹ 1,290.00	₹ 68.42	
10 km	21.00 kmh ⁻¹	4.10 nos.	88.00 km	17.60 l	₹ 955.15	0.629 l	₹ 157.25	₹ 1,800.00	₹ 2,650.00	₹ 5,562.40	₹ 1,356.68	₹ 66.68	₹ 58.57
11 km	21.50 kmh ⁻¹	3.95 nos.	92.90 km	18.58 l	₹ 1,008.34	0.664 l	₹ 166.00	₹ 1,800.00	₹ 2,650.00	₹ 5,624.34	₹ 1,423.88	₹ 67.20	
12 km	22.00 kmh ⁻¹	3.83 nos.	97.92 km	19.58 l	₹ 1,062.61	0.699 l	₹ 174.75	₹ 1,800.00	₹ 2,650.00	₹ 5,687.36	₹ 1,484.95	₹ 61.07	
13 km	22.50 kmh ⁻¹	3.71 nos.	102.46 km	20.49 l	₹ 1,111.99	0.732 l	₹ 183.00	₹ 1,800.00	₹ 2,650.00	₹ 5,744.99	₹ 1,548.51	₹ 63.56	
14 km	23.00 kmh ⁻¹	3.61 nos.	107.08 km	21.42 l	₹ 1,162.46	0.765 l	₹ 191.25	₹ 1,800.00	₹ 2,650.00	₹ 5,803.71	₹ 1,607.68	₹ 59.17	
15 km	23.50 kmh ⁻¹	3.51 nos.	111.30 km	22.26 l	₹ 1,208.05	0.795 l	₹ 198.75	₹ 1,800.00	₹ 2,650.00	₹ 5,856.80	₹ 1,668.60	₹ 60.92	
16 km	24.00 kmh ⁻¹	3.43 nos.	115.76 km	23.15 l	₹ 1,256.35	0.827 l	₹ 206.75	₹ 1,800.00	₹ 2,650.00	₹ 5,913.10	₹ 1,723.94	₹ 55.34	
17 km	24.50 kmh ⁻¹	3.35 nos.	119.90 km	23.98 l	₹ 1,301.39	0.856 l	₹ 214.00	₹ 1,800.00	₹ 2,650.00	₹ 5,965.39	₹ 1,780.71	₹ 56.77	
18 km	25.00 kmh ⁻¹	3.28 nos.	124.08 km	24.82 l	₹ 1,346.98	0.886 l	₹ 221.50	₹ 1,800.00	₹ 2,650.00	₹ 6,018.48	₹ 1,834.90	₹ 54.19	
19 km	25.50 kmh ⁻¹	3.21 nos.	127.98 km	25.60 l	₹ 1,389.31	0.914 l	₹ 228.50	₹ 1,800.00	₹ 2,650.00	₹ 6,067.81	₹ 1,890.28	₹ 55.38	
20 km	26.00 kmh ⁻¹	3.15 nos.	132.00 km	26.40 l	₹ 1,432.73	0.943 l	₹ 235.75	₹ 1,800.00	₹ 2,650.00	₹ 6,118.48	₹ 1,942.37	₹ 52.09	

Distance/ Lead in km	Average speed	Nos of Trips in 8 Hours shift $N=8/[(2d/S)+1]$	Nos of km covered in 8 hrs. shift (2Nd+6)	Diesel consumed @ 5 km/litre	Cost of Diesel @ ` 54.27 per Litre	Mobil oil consumed @ 140 km/litre	Cost of Mobil oil @ ` 250 per Litre	Cost of loading, unloading & stacking 6 nos. Beldars for 8 hours @ `300.00 per day	Hire charges of truck @`2650.00 per day	Total Cost=6+8+9 +10	Cost per Trip '= col. 11/col. 3	Increase in cost per km over previous km	Average cost per additional km after first 5,10 and 20 km
1	2	3	4	5	6	7	8	9	10	11	12	13	14
21 km	26.50 kmh ⁻¹	3.09 nos.	135.78 km	27.16 l	₹ 1,473.97	0.970 l	₹ 242.50	₹ 1,800.00	₹ 2,650.00	₹ 6,166.47	₹ 1,995.62	₹ 53.25	₹ 47.38
22 km	27.00 kmh ⁻¹	3.04 nos.	139.76 km	27.95 l	₹ 1,516.85	0.998 l	₹ 249.50	₹ 1,800.00	₹ 2,650.00	₹ 6,216.35	₹ 2,044.85	₹ 49.23	
23 km	27.50 kmh ⁻¹	2.99 nos.	143.54 km	28.71 l	₹ 1,558.09	1.025 l	₹ 256.25	₹ 1,800.00	₹ 2,650.00	₹ 6,264.34	₹ 2,095.10	₹ 50.25	
24 km	28.00 kmh ⁻¹	2.95 nos.	147.60 km	29.52 l	₹ 1,602.05	1.054 l	₹ 263.50	₹ 1,800.00	₹ 2,650.00	₹ 6,315.55	₹ 2,140.86	₹ 45.76	
25 km	28.50 kmh ⁻¹	2.90 nos.	151.00 km	30.20 l	₹ 1,638.95	1.079 l	₹ 269.75	₹ 1,800.00	₹ 2,650.00	₹ 6,358.70	₹ 2,192.66	₹ 51.80	
26 km	29.00 kmh ⁻¹	2.86 nos.	154.72 km	30.94 l	₹ 1,679.11	1.105 l	₹ 276.25	₹ 1,800.00	₹ 2,650.00	₹ 6,405.36	₹ 2,239.64	₹ 46.98	
27 km	29.50 kmh ⁻¹	2.83 nos.	158.82 km	31.76 l	₹ 1,723.62	1.134 l	₹ 283.50	₹ 1,800.00	₹ 2,650.00	₹ 6,457.12	₹ 2,281.67	₹ 42.03	
28 km	30.00 kmh ⁻¹	2.79 nos.	162.24 km	32.45 l	₹ 1,761.06	1.159 l	₹ 289.75	₹ 1,800.00	₹ 2,650.00	₹ 6,500.81	₹ 2,330.04	₹ 48.37	
29 km	30.50 kmh ⁻¹	2.76 nos.	166.08 km	33.22 l	₹ 1,802.85	1.186 l	₹ 296.50	₹ 1,800.00	₹ 2,650.00	₹ 6,549.35	₹ 2,372.95	₹ 42.91	
30 km	31.00 kmh ⁻¹	2.73 nos.	169.80 km	33.96 l	₹ 1,843.01	1.213 l	₹ 303.25	₹ 1,800.00	₹ 2,650.00	₹ 6,596.26	₹ 2,416.21	₹ 43.26	

- Notes
1. Number of trips in working day of 8 hours $N=8/[(2d/s)+1]$ where d= Distance/Lead in km., S= Average speed in kmh⁻¹, 1 hour is allowed for loading /unloading.
 2. Consumption of diesel taken at 5 km per litre
 3. Consumption of mobile oil taken at 140 km per litre.
 4. In column 4 of '**km covered in 8 hours**' an allowance of 6.0 km has been made for movement of truck from parking place to duty & back.
 - 5 (i) Cost of disel @ (01001) per litre
(ii) Cost of moble oil @ (01002) per litre
(iii) Hire charges of truck @ (0116) for a day of 8 hours.

SUB HEAD : 1.0
CARRIAGE OF MATERIALS
1.0 Carriage of Materials
1.1 By Mechanical Transport

Sl.No	Materials	Carrying capacity of Truck per Trip	Net Qty Payable of after deduction for voids	Unit of rates	C.P. & Over-heads @15%	Cost per Trip per unit					Beyond 5 km upto 10 km per km	Beyond 10 km upto 20km per km	Beyond 20 km per addl. Km	Remarks
						Cost per Trip as per Col. 12 of Data sheet								
						Net Qty Payable								
						As per Col. 14 of Data Sheet								
						1 km	2 km	3 km	4 km	5 km	Net Qty Payable			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.1.1	Lime, moorum, building rubbish	9 tonnes 7.65 cum	7.65 cum 0%	cum	15%	₹ 99.48	₹ 112.59	₹ 125.55	₹ 138.00	₹ 150.09	₹ 10.77	₹ 8.80	₹ 7.12	
1.1.2	Earth	9 tonnes 6.75 cum	5.40 cum -20%	cum	15%	₹ 140.93	₹ 159.50	₹ 177.86	₹ 195.50	₹ 212.63	₹ 15.26	₹ 12.47	₹ 10.09	
1.1.3	Manure or sludge	9 tonnes 7.50 cum	6.90 cum -8%	cum	15%	₹ 110.30	₹ 124.83	₹ 139.20	₹ 153.00	₹ 166.41	₹ 11.94	₹ 9.76	₹ 7.90	
1.1.4	Excavated rock	9 tonnes 4.33 cum	2.17 cum -50%	cum	15%	₹ 350.71	₹ 396.91	₹ 442.61	₹ 486.50	₹ 529.13	₹ 37.97	₹ 31.04	₹ 25.11	
1.1.5	Sand	9 tonnes 7.00 cum	7.00 cum 0%	cum	15%	₹ 108.72	₹ 123.04	₹ 137.21	₹ 150.81	₹ 164.03	₹ 11.77	₹ 9.62	₹ 7.78	
1.1.6	Stone aggregate below 40 mm nominal size	9 tonnes 6.25 cum	6.25 cum 0%	cum	15%	₹ 121.77	₹ 137.81	₹ 153.67	₹ 168.91	₹ 183.71	₹ 13.18	₹ 10.78	₹ 8.72	
1.1.7	Stone aggregate 40 mm nominal size and above	9 tonnes 6.25 cum	5.78 cum -7.5%	cum	15%	₹ 131.67	₹ 149.01	₹ 166.17	₹ 182.65	₹ 198.65	₹ 14.25	₹ 11.65	₹ 9.43	
1.1.8	Soling stone	9 tonnes 4.90 cum	4.17 cum -15.0%	cum	15%	₹ 182.51	₹ 206.55	₹ 230.33	₹ 253.17	₹ 275.35	₹ 19.76	₹ 16.15	₹ 13.07	
1.1.9	Bricks	9 tonnes 3000 nos.	3000 nos.	1000 Nos.	15%	₹ 253.68	₹ 287.10	₹ 320.15	₹ 351.90	₹ 382.74	₹ 27.46	₹ 22.45	₹ 18.16	
1.1.10	Brick Tiles	9 tonnes 5000 nos.	5000 nos.	1000 Nos.	15%	₹ 152.21	₹ 172.26	₹ 192.09	₹ 211.14	₹ 229.64	₹ 16.48	₹ 13.47	₹ 10.90	
1.1.11	Cement, stone blocks, G.I., A.C., & C.C.pipes below 100 mm dia. and other heavy materials	9 tonnes	9 tonnes	tonne	15%	₹ 84.56	₹ 95.70	₹ 106.72	₹ 117.30	₹ 127.58	₹ 9.15	₹ 7.48	₹ 6.05	
1.1.12	Steel	9 tonnes	9 tonnes	tonne	15%	₹ 84.56	₹ 95.70	₹ 106.72	₹ 117.30	₹ 127.58	₹ 9.15	₹ 7.48	₹ 6.05	
1.1.13	Timber	9 tonnes 12.38 cum	12.38 cum	cum	15%	₹ 61.47	₹ 69.57	₹ 77.58	₹ 85.27	₹ 92.75	₹ 6.66	₹ 5.44	₹ 4.40	
1.1.14	Tar bitumen	9 tonnes	9 tonnes	tonne	15%	₹ 84.56	₹ 95.70	₹ 106.72	₹ 117.30	₹ 127.58	₹ 9.15	₹ 7.48	₹ 6.05	
1.1.15	Solvent	9 tonnes 80.00 qtls	80.00 qtls	qtl	15%	₹ 9.51	₹ 10.77	₹ 12.01	₹ 13.20	₹ 14.35	₹ 1.03	₹ 0.84	₹ 0.68	
1.1.16	Steam coal	9 tonnes	9 tonnes	tonne	15%	₹ 84.56	₹ 95.70	₹ 106.72	₹ 117.30	₹ 127.58	₹ 9.15	₹ 7.48	₹ 6.05	

Sl.No	Materials	Carrying capacity of Truck per Trip	Net Qty Payable of after deduction for voids	Unit of rates	C.P. & Over-heads @15%	Cost per Trip per unit					Beyond 5 km upto 10 km per km	Beyond 10 km upto 20km per km	Beyond 20 km per addl. Km	Remarks
						Cost per Trip as per Col. 12 of Data sheet								
						Net Qty Payable								
						As per Col. 14 of Data Sheet								
						1 km	2 km	3 km	4 km	5 km				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.1.17	S.W. pipe													
1.1.16.1	100 mm dia [600 mm length of weight 14kg/m]	9 tonnes 975 pipes	585.00 m	100 m	15%	₹ 130.09	₹ 147.23	₹ 164.18	₹ 180.46	₹ 196.28	₹ 14.08	₹ 11.51	₹ 9.31	
1.1.16.2	150 mm dia [600 mm length of weight 22kg/m]	9 tonnes 500 pipes	300.00 m	100 m	15%	₹ 253.68	₹ 287.10	₹ 320.15	₹ 351.90	₹ 382.74	₹ 27.46	₹ 22.45	₹ 18.16	
1.1.16.3	200 mm dia [600 mm length of weight 33kg/m]	9 tonnes 300 pipes	180.00 m	100 m	15%	₹ 422.80	₹ 478.50	₹ 533.59	₹ 586.50	₹ 637.90	₹ 45.77	₹ 37.42	₹ 30.27	
1.1.16.4	230 mm dia [600 mm length of weight 42kg/m]	9 tonnes 210 pipes	126.00 m	100 m	15%	₹ 604.01	₹ 683.57	₹ 762.27	₹ 837.86	₹ 911.28	₹ 65.39	₹ 53.46	₹ 43.25	
1.1.16.5	250 mm dia [600 mm length of weight 52kg/m]	9 tonnes 175 pipes	105.00 m	100 m	15%	₹ 724.81	₹ 820.29	₹ 914.72	₹ 1,005.43	₹ 1,093.54	₹ 78.47	₹ 64.15	₹ 51.90	
1.1.16.6	300 mm dia [600 mm length of weight 79kg/m]	9 tonnes 140 pipes	84.00 m	100 m	15%	₹ 906.01	₹ 1,025.36	₹ 1,143.40	₹ 1,256.79	₹ 1,366.93	₹ 98.09	₹ 80.18	₹ 64.87	
1.1.16.7	350 mm dia [600 mm length of weight 100kg/m]	9 tonnes 100 pipes	60.00 m	100 m	15%	₹ 1,268.41	₹ 1,435.51	₹ 1,600.76	₹ 1,759.50	₹ 1,913.70	₹ 137.32	₹ 112.26	₹ 90.82	
1.1.16.8	400 mm dia [600 mm length of weight 147kg/m]	9 tonnes 70 pipes	42.00 m	100 m	15%	₹ 1,812.02	₹ 2,050.72	₹ 2,286.80	₹ 2,513.57	₹ 2,733.85	₹ 196.17	₹ 160.37	₹ 129.74	
1.1.16.9	450 mm dia [600 mm length of weight 160kg/m]	9 tonnes 55 pipes	33.00 m	100 m	15%	₹ 2,306.20	₹ 2,610.01	₹ 2,910.48	₹ 3,199.09	₹ 3,479.45	₹ 249.68	₹ 204.10	₹ 165.13	
1.1.16.10	500 mm dia [600 mm length of weight 180kg/m]	9 tonnes 50 pipes	30.00 m	100 m	15%	₹ 2,536.82	₹ 2,871.01	₹ 3,201.52	₹ 3,519.00	₹ 3,827.39	₹ 274.64	₹ 224.51	₹ 181.64	
1.1.16.11	600 mm dia [600 mm length of weight 240kg/m]	9 tonnes 42 pipes	25.20 m	100 m	15%	₹ 3,020.03	₹ 3,417.87	₹ 3,811.34	₹ 4,189.29	₹ 4,556.42	₹ 326.96	₹ 267.28	₹ 216.24	

Sl.No	Materials	Carrying capacity of Truck per Trip	Net Qty Payable of after deduction for voids	Unit of rates	C.P. & Over-heads @15%	Cost per Trip per unit					Beyond 5 km upto 10 km per km	Beyond 10 km upto 20km per km	Beyond 20 km per addl. Km	Remarks
						Cost per Trip as per Col. 12 of Data sheet								
						Net Qty Payable								
						As per Col. 14 of Data Sheet								
						1 km	2 km	3 km	4 km	5 km				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.1.17	R.C.C. pipes, A.C. pipes,steel cylinder, R.C. pipes,C.I. pipes, C.I. pipes and unreinforced cement pipes													
1.1.17.1	100 mm dia [3.66 m long]	9 tonnes 100 pipes	366.00 m	100 m	15%	₹ 207.94	₹ 235.33	₹ 262.42	₹ 288.44	₹ 313.72	₹ 22.51	₹ 18.40	₹ 14.89	
1.1.17.2	125 mm dia [3.66 m long]	9 tonnes 75 pipes	274.50 m	100 m	15%	₹ 277.25	₹ 313.77	₹ 349.89	₹ 384.59	₹ 418.29	₹ 30.02	₹ 24.54	₹ 19.85	
1.1.17.3	150 mm dia [3.66 m long]	9 tonnes 60 pipes	219.60 m	100 m	15%	₹ 346.56	₹ 392.21	₹ 437.37	₹ 480.74	₹ 522.87	₹ 37.52	₹ 30.67	₹ 24.81	
1.1.17.4	200 mm dia [3.66 m long]	9 tonnes 37 pipes	135.42 m	100 m	15%	₹ 561.99	₹ 636.02	₹ 709.24	₹ 779.57	₹ 847.89	₹ 60.84	₹ 49.74	₹ 40.24	
1.1.17.5	250 mm dia [3.66 m long]	9 tonnes 26 pipes	95.16 m	100 m	15%	₹ 799.76	₹ 905.11	₹ 1,009.31	₹ 1,109.39	₹ 1,206.62	₹ 86.58	₹ 70.78	₹ 57.26	
1.1.17.6	300 mm dia [3.66 m long]	9 tonnes 21 pipes	76.86 m	100 m	15%	₹ 990.17	₹ 1,120.61	₹ 1,249.62	₹ 1,373.54	₹ 1,493.91	₹ 107.20	₹ 87.63	₹ 70.90	
1.1.17.7	350 mm dia [3.66 m long]	9 tonnes 15 pipes	54.90 m	100 m	15%	₹ 1,386.24	₹ 1,568.86	₹ 1,749.47	₹ 1,922.95	₹ 2,091.47	₹ 150.08	₹ 122.69	₹ 99.26	
1.1.17.8	400 mm dia [3.66 m long]	9 tonnes 11 pipes	40.26 m	100 m	15%	₹ 1,890.33	₹ 2,139.35	₹ 2,385.64	₹ 2,622.21	₹ 2,852.01	₹ 204.65	₹ 167.30	₹ 135.35	
1.1.17.9	450 mm & 500 mm dia [3.66 m long]	9 tonnes 9 pipes	32.94 m	100 m	15%	₹ 2,310.40	₹ 2,614.77	₹ 2,915.78	₹ 3,204.92	₹ 3,485.78	₹ 250.13	₹ 204.48	₹ 165.43	
1.1.17.10	600, 700, 750 & 800 mm [3.66 m long]	9 tonnes 6 pipes	21.96 m	100 m	15%	₹ 3,465.61	₹ 3,922.15	₹ 4,373.67	₹ 4,807.38	₹ 5,228.68	₹ 375.20	₹ 306.71	₹ 248.14	
1.1.17.11	900 mm dia [3.66 m long]	9 tonnes 4 pipes	14.64 m	100 m	15%	₹ 5,198.41	₹ 5,883.22	₹ 6,560.50	₹ 7,211.07	₹ 7,843.02	₹ 562.79	₹ 460.07	₹ 372.21	
1.1.17.12	1000, 1100 & 1200 mm dia [3.66 m long]	9 tonnes 3 pipes	10.98 m	100 m	15%	₹ 6,931.21	₹ 7,844.30	₹ 8,747.33	₹ 9,614.75	₹ 10,457.35	₹ 750.39	₹ 613.43	₹ 496.28	

1.0 Carriage of Materials

1.2 By Manual Labour including loading, unloading and stacking for lead less than 0.5 KM

Data Sheet for Analysis of Rates

Code	Name	Unit	Rate
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00

As per actual observation on different projects the following quantity of building materials up to a first lead of 50 m will be carried in 8 hours shift by 7.67 labourers either beldar or coolie. However labour required for stacking would be extra.

1. Lime, mooram, earth, building rubbish etc.	35 cum
2. Sand, ballast and boulders	28 cum
3. Bricks	15000 nos
4. Brick Tiles, Roofing tiles (Flat or round)	24000 nos
5. Steam coal	30 tonnes

NOTE : It was further observed that for carrying the above materials to every further lead of 50 m or part thereof upto a distance of 0.5 km in the shift of 8 hours, additional 1.67 Nos. of extra coolie (Female coolie) will be required.

Sl. No.	Materials	Carrying Capacity of labour for 8 hours shift	Qty. to be paid after deduction for voids	Unit	Cost of carriage including loading and unloading		Cost including 5% for stacking the materials conveyed in 8 hours shift plus 15% towards contractor's profit and overheads		Cost per cum/ tonne/ Nos.	
					For First 50 m	For every further lead of 50 m or part thereof beyond first 50 m upto a distance of 500 m	` x+20%	` y+20%	For lead up to 50 m	For every further lead of 50 m upto a lead of 0.5 km
					` x	` y			` x+20%/qty.	` y+20%/qty.
1	2	3	4	5	6	7	8	9	10	11
1.2.1	Lime, mooram building rubbish	35.00 cum	35.00 cum	cum	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 78.89	₹ 17.18
1.2.2	Earth	35.00 cum	28.00 cum	cum	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 98.61	₹ 21.47
1.2.3	Manure or sludge	35.00 cum	32.20 cum	cum	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 85.75	₹ 18.67
1.2.4	Excavated rock	35.00 cum	17.50 cum	cum	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 157.78	₹ 34.35
1.2.5	Sand, brick/stone aggregate below 40 mm nominal size	28.00 cum	28.00 cum	cum	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 98.61	₹ 21.47
1.2.6	Brick/ Stone aggregate 40 mm nominal size and above	28.00 cum	25.90 cum	cum	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 106.61	₹ 23.21
1.2.7	Soling stone	28.00 cum	23.80 cum	cum	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 116.02	₹ 25.26
1.2.8	Bricks	15000 nos.	15000 nos.	1000 nos.	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 184.08	₹ 40.08
1.2.9	Brick Tiles, Allahabad roofing tiles (Flat or round)	24000 nos.	24000 nos.	1000 nos.	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 115.05	₹ 25.05
1.2.10	Steam coal	30 tonnes	30 tonnes	tonnes	₹ 2,301.00	₹ 501.00	₹ 2,761.20	₹ 601.20	₹ 92.04	₹ 20.04

1.0 Carriage of Materials

1.3 By Manual Labour including loading, unloading and stacking for lead less than 0.5 KM
Data Sheet for Analysis of Rates

Code	Name	Unit	Rate
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00

Normal carrying capacity of the selected building materials up to a first lead of 50 m will be carried in 8 hours shift by 9.2 Nos. labourers either beldar or coolie. However labour required for stacking would be extra.

1. Stone blocks, G.I., C.I.pipes below 100 mm dia and other heavy materials	46 tonnes
2. Cement	57.99 tonnes
3. Steel	27 tonnes
4. Timber	42 cum
5. Tar bitumen etc	46 tonnes
6. S.W. pipe	
6.1. 100 mm dia	2298.00 m
6.2. 150 mm dia	1398.00 m
6.3. 200 mm dia	999.00 m
6.4. 230 mm dia	780.00 m
6.5. 250 mm dia	600.00 m
6.6. 300 mm dia	420.00 m
6.7. 350 mm dia	300.00 m
6.8. 400 mm dia	240.00 m
6.9. 450 mm dia	198.00 m
6.10. 500 mm dia	162.00 m
6.11. 600 mm dia	132.00 m
7. R.C.C. pipes, steel cylinder, R.C. pipes, C.I. pipes, and unreinforced cement pipes	
7.1. 100 mm dia	1702.00 m
7.2. 125 mm dia	1391.00 m
7.3. 150 mm dia	1208.00 m
7.4. 200 mm dia	805.00 m
7.5. 250 mm dia	458.00 m
7.6. 300 mm dia	366.00 m
7.7. 350 mm dia	256.00 m
7.8. 400 mm dia	220.00 m
7.9. 450 mm dia & 500 mm dia	165.00 m
7.10. 600, 700, 750 & 800 mm dia	50.00 m
8. Asbestors cement pipes	
8.1. 50 mm dia	10064.00 m
8.2. 80 mm dia	3660.00 m
8.3. 100 mm dia	2562.00 m
8.4. 150 mm dia	1830.00 m

NOTE : It was further observed that for carrying the above materials to every further lead of 50 m or part thereof upto a distance of 0.5 km in the shift of 8 hours, additional 1.35 Nos. of extra Beldar/coolie will be required.

Sl. No.	Materials	Carrying Capacity of labour for 8 hours shift	Unit	Cost of carriage including loading and unloading		Cost including 5% for stacking the materials conveyed in 8 hours shift plus 15% towards contractor's profit and overheads		Cost per cum/ tonne/ 100m	
				For First 50 m	For every further lead of 50 m or part thereof beyond first 50 m upto a distance of 500 m	` x+20%	` y+20%	For lead up to 50 m	For every further lead of 50 m upto a lead of 0.5 km
				` x	` y			` x+20%/qty.	` y+20%/qty.
1	2	4	5	6	7	8	9	10	11
1.3.1	Stone blocks, G.I., C.I.pipes below 100 mm dia and other heavy materials	46 tonnes	tonne	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 72.00	₹ 10.57
1.3.2	Cement	57.99 tonnes	tonne	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 57.11	₹ 8.38
1.3.3	Steel	27 tonnes	tonne	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 122.67	₹ 18.00
1.3.4	Timber	42.00 cum	cum	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 78.86	₹ 11.57
1.3.5	Tar bitumen etc	46 tonnes	tonne	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 72.00	₹ 10.57
1.3.6	S.W. pipes 600 mm long								
1.3.6.1	100 mm dia	2298.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 144.13	₹ 21.15
1.3.6.2	150 mm dia	1398.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 236.91	₹ 34.76
1.3.6.3	200 mm dia	999.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 331.53	₹ 48.65
1.3.6.4	230 mm dia	780.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 424.62	₹ 62.31
1.3.6.5	250 mm dia	600.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 552.00	₹ 81.00
1.3.6.6	300 mm dia	420.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 788.57	₹ 115.71
1.3.6.7	350 mm dia	300.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 1,104.00	₹ 162.00
1.3.6.8	400 mm dia	240.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 1,380.00	₹ 202.50
1.3.6.9	450 mm dia	198.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 1,672.73	₹ 245.45
1.3.6.10	500 mm dia	162.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 2,044.44	₹ 300.00
1.3.6.11	600 mm dia	132.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 2,509.09	₹ 368.18
1.3.7	R.C.C. pipes, steel cylinder, R.C. pipes, C.I. pipes, and unreinforced cement pipes 3.66 m long								
1.3.7.1	100 mm dia	1702.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 194.59	₹ 28.55
1.3.7.2	125 mm dia	1391.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 238.10	₹ 34.94
1.3.7.3	150 mm dia	1208.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 274.17	₹ 40.23
1.3.7.4	200 mm dia	805.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 411.43	₹ 60.37
1.3.7.5	250 mm dia	458.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 723.14	₹ 106.11

1.3.7.6	300 mm dia	366.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 904.92	₹ 132.79
1.3.7.7	350 mm dia	256.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 1,293.75	₹ 189.84
1.3.7.8	400 mm dia	220.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 1,505.45	₹ 220.91
1.3.8	R.C.C. pipes, steel cylinder, R.C. pipes, C.I. pipes, and unreinforced cement pipes 3.0 m long								
1.3.8.1	450 mm dia & 500 mm dia	165.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 2,007.27	₹ 294.55
1.3.8.2	600, 700, 750 & 800 mm dia	50.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 6,624.00	₹ 972.00
1.3.9	Asbestors cement pipes 2.0 m long								
1.3.9.1	50 mm dia	10064.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 32.91	₹ 4.83
1.3.9.2	80 mm dia	3660.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 90.49	₹ 13.28
1.3.9.3	100 mm dia	2562.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 129.27	₹ 18.97
1.3.9.4	150 mm dia	1830.00 m	100.00 m	₹ 2,760.00	₹ 405.00	₹ 3,312.00	₹ 486.00	₹ 180.98	₹ 26.56

S U B - H E A D - 2



E A R T H W O R K

SUB HEAD : 2.0 / EARTH WORK
BASIC RATES

Code No.	Description	Unit	Rate
0205	Bhisti/Waterman	day	₹ 300.00
0203	Beldar	day	₹ 300.00
0212	Coolie/Helper	day	₹ 300.00
0216	Foreman	day	₹ 425.00
0215	Fitter (grade 1)	day	₹ 380.00
0218*	Mason (average)	day	₹ 400.00
0208*	Carpenter (average)	day	₹ 400.00
02004	Kerosene oil	litre	₹ 48.00
01001	Diesel	litre	₹ 54.27
02002	Sand (Fine): Local quarry	cum	₹ 300.00
02001	Chlorpyriphos 20% E.C. / Lindane 20% E.C.	litre	₹ 250.00
0455	Carriage: Chemical	tonne	₹ 124.80
0425	Carriage: Sand (Fine): Local quarry	cum	₹ 142.63
0115	Hire charge of Diesel Road Roller - 8 to 10 tonne	day	₹ 2,653.00
0117	Hire charge of Pump set of capacity 4000 litres/hour	day	₹ 636.00
0118	Hire charge of Hydraulic Excavator (3D) with driver and fuel	hour	₹ 1,296.00
0111	Hire and running charge of Tripper	day	₹ 2,250.00
0127	Hire and running charge of Tractor with ripper attachment	day	₹ 1,472.00

SUB HEAD : 2.0

EARTH WORK

PREPARATORY WORK

2.1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm area				
	LABOUR:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
					₹ 522.50
	Add for Sundries and contingencies	@	3%		₹ 15.68
					₹ 538.18
	Add for contractor's profit and overheads	@	15%		₹ 80.73
	Cost of clearing jungle for 100 sqm area				₹ 618.91
	Cost per sqm				₹ 6.19
	Rate per sqm	Say			₹ 6.20

2.2	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm area				
	LABOUR:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar (M)	Day	0.42	₹ 300.00	₹ 126.00
0212	Coolie (F)	Day	0.42	₹ 300.00	₹ 126.00
					₹ 294.50
	Add for Sundries and contingencies	@	3%		₹ 8.84
					₹ 303.34
	Add for contractor's profit and overheads	@	15%		₹ 45.50
	Cost of clearing grass for 100 sqm area				₹ 348.84
	Cost per sqm				₹ 3.49
	Rate per sqm	Say			₹ 3.50

2.3	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches removing the roots and stacking of serviceable material and disposal of unserviceable material.				
2.3.1	Beyond 30 cm girth upto and including 60 cm girth				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for cutting tree of average girth 47cm, height 3.0m Quantity of wood to be cut in trunk of 15 cm average dia = $1/4(\pi \times 0.15^2) \times 3.0 = 0.053 \text{ cum}$ Add for branches 20% = 0.011 cum Total = 0.064 cum				

	LABOUR:				
	For cutting the trees, removing the roots, filling the depressions pits and stacking/disposal of the surplus materials				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0203	Beldar (M)	Day	0.40	₹ 300.00	₹ 120.00
0212	Coolie (F)	Day	0.40	₹ 300.00	₹ 120.00
					₹ 282.50
	Add for Sundries and contingencies	@	3%		₹ 8.48
					₹ 290.98
	Add for contractor's profit and overheads	@	15%		₹ 43.65
	Cost of cutting tree upto 3.0m height and girth beyond 30 cm girth upto and including 60 cm girth of 0.064 cum				₹ 334.63
	Rate per No.	Say			₹ 334.60

2.3.2	Beyond 60 cm girth upto and including 120 cm girth				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for cutting tree of average girth 94.25cm, height 5.0m Quantity of wood to be cut in trunk of 30 cm average dia = $1/4(\pi \times 0.30^2) \times 5.0 = 0.35\text{cum}$ Add for branches 20% = 0.07 cum Total = 0.42 cum				
	LABOUR:				
	For cutting the trees, removing the roots, filling the depressions pits and stacking/disposal of the surplus materials				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0203	Beldar (M)	Day	2.00	₹ 300.00	₹ 600.00
0212	Coolie (F)	Day	0.25	₹ 300.00	₹ 75.00
					₹ 738.75
	Add for Sundries and contingencies	@	3%		₹ 22.16
					₹ 760.91
	Add for contractor's profit and overheads	@	15%		₹ 114.14
	Cost of cutting tree upto 5.0m height and girth beyond 60 cm girth upto and including 120 cm girth of 0.42 cum				₹ 875.05
	Rate per No.	Say			₹ 875.10

2.3.3	Beyond 120 cm girth upto and including 240 cm girth				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for cutting tree of average girth 188.5cm, height 7.0m Quantity of wood to be cut in trunk of 60 cm average dia = $1/4(\pi \times 0.602^2) \times 7.0 = 1.98\text{cum}$ Add for branches 20% = 0.40 cum Total = 2.38 cum				
	LABOUR:				

	For cutting the trees, removing the roots, filling the depressions pits and stacking/disposal of the surplus materials				
0216	Foreman	Day	0.2	₹ 425.00	₹ 85.00
0203	Beldar (M)	Day	8.00	₹ 300.00	₹ 2,400.00
0212	Coolie (F)	Day	2.50	₹ 300.00	₹ 750.00
					₹ 3,235.00
	Add for Sundries and contingencies	@	3%		₹ 97.05
					₹ 3,332.05
	Add for contractor's profit and overheads	@	15%		₹ 499.81
	Cost of cutting tree upto 7.0m height and girth beyond 120 cm girth upto and including 240 cm girth of 2.38 cum				₹ 3,831.86
	Rate per No.	Say			₹ 3,831.90

2.3.4	Above 240 cm girth				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for cutting tree of average girth 314.16cm, height 10.0m Quantity of wood to be cut in trunk of 100 cm average dia = $1/4(\pi \times 1.02) \times 10.0 = 7.85\text{cum}$ Add for branches 20% = 1.57 cum Total = 9.42 cum				
	LABOUR:				
	For cutting the trees, removing the roots, filling the depressions pits and stacking/disposal of the surplus materials				
0216	Foreman	Day	0.5	₹ 425.00	₹ 212.50
0203	Beldar (M)	Day	17.00	₹ 300.00	₹ 5,100.00
0212	Coolie (F)	Day	4.00	₹ 300.00	₹ 1,200.00
					₹ 6,512.50
	Add for Sundries and contingencies	@	3%		₹ 195.38
					₹ 6,707.88
	Add for contractor's profit and overheads	@	15%		₹ 1,006.18
	Cost of cutting tree upto 10.0m height and girth beyond 240 cm girth of 9.42 cum				₹ 7,714.06
	Rate per No.	Say			₹ 7,714.10

2.4	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.				
	-All kinds of soil				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm area				
	LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0203	Beldar (M)	Day	1.60	₹ 300.00	₹ 480.00
0212	Coolie (F)	Day	1.60	₹ 300.00	₹ 480.00
					₹ 1,023.75
	Add for Sundries and contingencies	@	3%		₹ 30.71
					₹ 1,054.46

	Add for contractor's profit and overheads	@	15%		₹ 158.17
	Cost of surface dressing for 100 sqm area				₹ 1,212.63
	Cost per sqm				₹ 12.13
	Rate per sqm	Say			₹ 12.10

2.5	Ploughing the existing ground to a depth of 15 cm to 25 cm and watering the same.				
	-All kinds of soil				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm area				
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar (M)	Day	0.25	₹ 300.00	₹ 75.00
0205	Bhishti/Waterman	Day	0.250	₹ 300.00	₹ 75.00
0127	Add cost of hire charges of tractor with ploughing arrangement	Day	0.250	₹ 1,472.00	₹ 368.00
0117	Add cost of hire charges of pump set	Day	0.250	₹ 636.00	₹ 159.00
					₹ 783.25
	Add for Sundries and contingencies	@	3%		₹ 23.50
					₹ 806.75
	Add for water charges	@	1%		₹ 8.07
					₹ 814.82
	Add for contractor's profit and overheads	@	15%		₹ 122.22
	Cost of ploughing 100sqm area				₹ 937.04
	Cost per sqm				₹ 9.37
	Rate per sqm	Say			₹ 9.40

2.6	Excavating holes upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil; as directed within a lead of 50 m and lift upto 1.5 m.				
	-All kinds of soil				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for digging 10 holes of 0.5cum each and refilling the same				
	Qty. of excavation = 10x0.50 = 5.00cum Approx. size of hole to be provided to obtain 0.5 cum per hole Aquare = 800x800x800 mm Circular = 860mm dia and 860 mm deep As the holes are fairly big the general rate of excavation in soil and refilling can be easily adopted.				
	Qty. of excavation	cum	5.00	₹ 150.10	₹ 750.50
	Qty. of refilling [Considering a loss of quantity of one cum for embedment and 0.4cum looseness in filling]	cum	3.60	₹ 116.40	₹ 419.04
0117	Add cost of hire charges of pump set	Day	0.050	₹ 636.00	₹ 31.80
					₹ 1,201.34
	Add for Sundries and contingencies	@	3%		₹ 36.04
					₹ 1,237.38
	Add for water charges	@	1%		₹ 12.37
					₹ 1,249.75
	Add for contractor's profit and overheads	@	15%		₹ 12.03
	Cost of excavating and refilling 10 holes				₹ 1,261.78
	Cost per hole of 0.5cum quantity				₹ 126.18
	Rate per hole	Say			₹ 126.20

EXCAVATION

2.7	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth upto 50 m and lift upto 1.5 m, disposed soil to be levelled and neatly dressed:				
	-All kinds of soil				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm area				
	LABOUR:				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar (M)	Day	6.00	₹ 300.00	₹ 1,800.00
0212	Coolie	Day	6.25	₹ 300.00	₹ 1,875.00
					₹ 3,760.00
	Add for Sundries and contingencies	@	3%		₹ 112.80
					₹ 3,872.80
	Add for water charges	@	1%		₹ 38.73
					₹ 3,911.53
	Add for contractor's profit and overheads	@	15%		₹ 586.73
	Cost of surface excavation for 100sqm area				₹ 4,498.26
	Rate per 100sqm	Say			₹ 4,498.30

2.8	Earth work in rough excavation, banking excavated earth in layers not exceeding 20 cm in depth, breaking clods watering, rolling each layer with ½ tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead upto 50 m and lift upto 1.5 m :				
	-All kinds of soil				
	Note: In case the measurement of actual filling is taken to calculate the quantity involved under this item, the entire quantity of filling thus calculated, should not be considered straightway for payment under this item, but the net quantity after deduction 10% quantity for not consolidating the filling under optimum moisture content only should be considered for payment, under this rate, i.e., if the calculated quantity of filling is 10 cum the payment should be made only for 9 cum under this item. (Refer CPWD specification clause 2.10.5)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10 cum rough excavation				
	The rate worked out shall be adopted only when the quantity payable is arrived by measuring actual excavation				
	LABOUR:				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar (M)	Day	5.50	₹ 300.00	₹ 1,650.00
0212	Coolie	Day	4.00	₹ 300.00	₹ 1,200.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
0115	Higher charge for power roller	Day	0.009	₹ 2,653.00	₹ 23.88
0117	Higher charge for pump set	Day	0.100	₹ 636.00	₹ 63.60
01001	Cost of diesel	litre	0.150	₹ 54.27	₹ 8.14
					₹ 3,105.62
	Add for 1/2 tonnes roller or steel roller	@	1.0%		₹ 31.06
					₹ 3,136.68
	Add for Sundries and contingencies	@	3%		₹ 94.10
					₹ 3,230.78
	Add for water charges	@	1%		₹ 32.31
					₹ 3,263.09

	Add for contractor's profit and overheads	@	15%		₹ 489.46
	Cost of Rough excavation for 10 cum				₹ 3,752.55
	Cost per cum				₹ 375.26
	Rate per cum	Say			₹ 375.30

2.9	Banking excavated earth in layers not exceeding 20 cm. in depth, breaking clods, watering, rolling each layer with ½ tonne roller, or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, flood banks, marginal banks, and guide banks etc., lead upto 50 m and lift upto 1.5 m.				
	-All kinds of soil				
	Note:(Refer CPWD specification clause 2.10.5) If the banking or filling is not consolidated to optimum moisture content the quantity of filling work out after actual measurement should be deducted by 10% to arrive at the net payable quantity. The measurement of excavation as prescribed in this item especially for consolidation, is not for consolidation with optimum moisture content. Hence the deduction of 10% quantity from the actual measured and calculated quantity to arrive a correct quantity for payment is mandatory.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 12.5 cum of excavated earth				
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar (M)	Day	2.00	₹ 300.00	₹ 600.00
0212	Coolie	Day	4.00	₹ 300.00	₹ 1,200.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
0115	Higher charge for power roller	Day	0.009	₹ 2,653.00	₹ 23.88
0117	Higher charge for pump set	Day	0.150	₹ 636.00	₹ 95.40
01001	Cost of diesel	litre	0.150	₹ 54.27	₹ 8.14
					₹ 2,093.67
	Add for 1/2 tonnes roller or steel roller	@	1.0%		₹ 20.94
					₹ 2,114.61
	Add for Sundries and contingencies	@	3%		₹ 63.44
					₹ 2,178.05
	Add for water charges	@	1%		₹ 21.78
					₹ 2,199.83
	Add for contractor's profit and overheads	@	15%		₹ 329.97
	Cost of consolidated quantity of banking = 10% less quantity of the actual measured quantity Payable quantity = 12.5 cum - 10% of 12.5 cum = 11.25 cum				₹ 2,529.80
	Cost per cum				₹ 224.87
	Rate per cum	Say			₹ 224.90

2.10	Deduct for not rolling with power roller of minimum 8 tonnes for banking excavated earth in layers not exceeding 20 cm in depth.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 12.5 cum of banking				
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0115	Higher charge for power roller	Day	0.009	₹ 2,653.00	₹ 23.88
01001	Cost of diesel	litre	0.150	₹ 54.27	₹ 8.14
					₹ 53.27
	Add for Sundries and contingencies	@	3%		₹ 1.60
					₹ 54.87
	Add for contractor's profit and overheads	@	15%		₹ 8.23

	Cost of be deducted from actual payable quantity after deducting 10% Payable quantity = 12.5 cum - 10% of 12.5 cum = 11.25 cum				₹ 63.10
	Cost per cum to be deducted				₹ 5.61
	Rate per cum to be deducted	Say			₹ 5.60

2.11	Deduct for not watering the excavated earth for banking				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 12.5 cum of banking				
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
0117	Higher charge for pump set	Day	0.15	₹ 636.00	₹ 95.40
					₹ 176.65
	Add for Sundries and contingencies	@	3%		₹ 5.30
					₹ 181.95
	Add for Water charges				₹ 21.78
					₹ 203.73
	Add for contractor's profit and overheads	@	15%		₹ 30.56
	Cost of be deducted from actual payable quantity after deducting 10% Payable quantity = 12.5 cum - 10% of 12.5 cum = 11.25 cum				₹ 438.02
	Cost per cum to be deducted				₹ 38.94
	Rate per cum to be deducted	Say			₹ 38.90

2.12	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
	-All kinds of soil				

Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10 cum of excavated earth over areas				
	MACHINERY:				
0118	Hydraulic Excavator (3D) with driver and fuel	Day	0.041	₹ 10,368.00	₹ 425.09
0111	Tripper	Day	0.041	₹ 2,250.00	₹ 92.25
	LABOUR:				
0203	Beldar (M)	Day	0.40	₹ 300.00	₹ 120.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
					₹ 1,087.34
	Add for Sundries and contingencies	@	3%		₹ 32.62
					₹ 1,119.96
	Add for contractor's profit and overheads	@	15%		₹ 167.99
	Cost of excavation over areas for 10 cum				₹ 1,287.95
	Cost per cum				₹ 128.80
	Rate per cum	Say			₹ 128.80

2.13	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	-All kinds of soil				

Code	Discription	Unit	Quantity	Rate	Amount

	Details of cost for 10 cum of excavated earth in foundation trenches or drains				
	MACHINERY:				
0118	Hydraulic Excavator (3D) with driver and fuel	Day	0.041	₹ 10,368.00	₹ 425.09
0111	Trippler	Day	0.041	₹ 2,250.00	₹ 92.25
	LABOUR:				
0203	Beldar (M)	Day	0.40	₹ 300.00	₹ 120.00
0212	Coolie	Day	2.10	₹ 300.00	₹ 630.00
					₹ 1,267.34
	Add for Sundries and contingencies	@	3%		₹ 38.02
					₹ 1,305.36
	Add for contractor's profit and overheads	@	15%		₹ 195.80
	Cost of excavation in foundation trenches for 10 cum				₹ 1,501.16
	Cost per cum				₹ 150.12
	Rate per cum	Say			₹ 150.10

2.14	Extra rates for quantities of works, executed:				
2.14.1	In or under water and/ or liquid mud, including pumping out water as required.				
Code	Discription	Unit	Quantity	Rate	Amount
	Extra due to slow progress and dewatering: 20% of the rate of the item. Extra percentage in rate is applicable in respect of each item but limited to quantities of work excuted in difficult condition.	Metre depth			

2.14.2	In or under foul position, including pumping out water as required.				
Code	Discription	Unit	Quantity	Rate	Amount
	Extra due to slow progress and dewatering: 25% of the rate of the item. This pertains to only such pumping of water as is envisaged at the time of tendering and don't include those that covered under contractual risk.	Metre depth			

Note for item no. 2.14:- The extra percentage rate is applicable in respect of each item but limited to quantities of work executed in these difficult conditions. The unit, namely, metre depth, to be considered for payment, shall be the depth measured from the sub soil water level up to the centre of gravity of the quantity executed in difficult condition. The depth shall be reckoned correct to 0.10m, 0.05m or more shall be taken as 0.10m and less than 0.05m ignore.

2.15	Deduct for disposed soil not levelled and neatly dressed.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10 cum of excavated earth				
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
					₹ 274.00
	Add for Sundries and contingencies	@	3.0%		₹ 8.22
					₹ 282.22
	Add for water charges	@	1%		₹ 2.82
					₹ 285.04
	Add for contractor's profit and overheads	@	15%		₹ 42.76
	Cost to be deducted for 10 cum				₹ 327.80

	Cost per cum to be deducted				₹ 32.78
	Rate per cum to be deducted	Say			₹ 32.80

2.16	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.				
	-All kinds of soil				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10 cum for filling available excavated earth				
	LABOUR:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar (M)	Day	1.40	₹ 300.00	₹ 420.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0203	Beldar for watering and ramming the filling	Day	0.70	₹ 300.00	₹ 210.00
					₹ 972.50
	Add for Sundries and contingencies	@	3.0%		₹ 29.18
					₹ 1,001.68
	Add for water charges	@	1%		₹ 10.02
					₹ 1,011.70
	Add for contractor's profit and overheads	@	15%		₹ 151.76
	Cost of filling for 10 cum				₹ 1,163.46
	Cost per cum				₹ 116.35
	Rate per cum	Say			₹ 116.40

2.17	Extra for additional lift of 1.5m or part thereof				
	-All kinds of soil				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10 cum excavated earth lifting				
	LABOUR:				
0203	Beldar (M)	Day	0.75	₹ 300.00	₹ 225.00
					₹ 225.00
	Add for ladders, ropes, baskets etc	@	2.0%		₹ 4.50
					₹ 229.50
	Add for Sundries and contingencies	@	3%		₹ 6.89
					₹ 236.39
	Add for contractor's profit and overheads	@	15%		₹ 35.46
	Cost of lifting for 10 cum earth beyond specified heights				₹ 271.85
	Cost per cum				₹ 27.19
	Rate per cum	Say			₹ 27.20

2.18	Supplying and filling in plinth, under floor, foundations etc. with sand (fine) from local quarry with all lifts including spreading in horizontal layers, watering, grading to required slope, ramming, consolidating and compacting each layer by using plate compactor or by any suitable method complete.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10 cum of sand filling				
	MATERIALS:				
02002	Sand	cum	10.00	₹ 300.00	₹ 3,000.00
	CARRIAGE:				
0425	Sand	cum	10.00	₹ 142.63	₹ 1,426.30
	LABOUR:				
0203	Beldar (M) / Coolie	Day	1.90	₹ 300.00	₹ 570.00
0203	Belder for ramming and watering	Day	0.50	₹ 300.00	₹ 150.00
					₹ 5,146.30
	Add for Sundries and contingencies	@	3.0%		₹ 154.39
					₹ 5,300.69

	Add for Water charges	@	1%		₹ 53.01
					₹ 5,353.70
	Add for contractor's profit and overheads	@	15%		₹ 803.06
	Cost of supplying and filling for 10 cum sand				₹ 6,156.76
	Cost per cum				₹ 615.68
	Rate per cum	Say			₹ 615.70

ANTI TERMITE TREATMENT

2.19	Supplying chemical emulsion in sealed containers including delivery as specified.				
2.19.1	Chlorpyriphos/Lindane emulsifiable concentrate of 20%				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 litres Chlorpyriphos/Lindane emulsifiable concentrate of 20%				
	MATERIALS:				
02001	Chlorpyriphos E.C.20%	litre	100.00	₹ 250.00	₹ 25,000.00
	CARRIAGE:				
0455	Chemical	tonne	0.10	₹ 124.80	₹ 12.48
					₹ 25,012.48
	Add for contractor's profit and overheads	@	15%		₹ 3,751.87
	Cost of supplying 100 litres chemical on site				₹ 28,764.35
	Cost per litre				₹ 287.64
	Rate per litre	Say			₹ 287.60

2.20	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment as per IS: 6313 (Part III)- Latest revision (excluding the cost of chemical emulsion):				
2.20.1	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres/sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:				
2.20.1.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for treatment of 10m. Length along external wall with Chlorpyriphos E.C. 20%				
	MATERIALS:				
	Chlorpyriphos E.C. 1% Concentration 10x0.30x7.50= 22.5litres Chlorpyriphos E.C. 20% Emulsifiable concentrate required = 22.5/20 = 1.125 litres [Cost of chemical paid seperately under Item No. 2.19]				
	LABOUR:				
	For excavating channel				
	Rodding in channel spreading emulsion etc				
0203	Belder	Day	0.45	₹ 300.00	₹ 135.00
					₹ 135.00
	Add for hire charges and maintenance of sprayer	@	5%		₹ 6.75
					₹ 141.75
	Add for Sundries and contingencies	@	3%		₹ 4.25
					₹ 146.00
	Add for Water charges	@	1%		₹ 1.46
					₹ 147.46

	Add for contractor's profit and overheads	@	15%		₹ 22.12
	Cost of treating of external wall for 10m length				₹ 169.58
	Cost per metre				₹ 16.96
	Rate per metre	Say			₹ 17.00

2.20.2	Along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 litres per linear metre including drilling and plugging holes etc.				
2.20.2.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for treatment of 10m. Length along external wall below apron with Chlorpyrifos E.C. 20%				
	MATERIALS:				
	Chlorpyrifos E.C. 1% Concentration 10x2.25= 22.5litres Chlorpyrifos E.C. 20% Emulsifiable concentrate required = 22.5/20 = 1.125 litres [Cost of chemical paid seperately under Item No. 2.19]				
	LABOUR:				
	1. For drilling 12mm dia. Holes at 300mm c/c with electric drilling machine				
	2. For injecting chemicals after diluiting the same as required and making good the holes with cement mortar				
0215	Fitter	Day	0.20	₹ 380.00	₹ 76.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
					₹ 226.00
	Add for hire charges and maintenance of sprayer, cost of cement mortar	@	3%		₹ 6.78
					₹ 232.78
	Add for Sundries and contingencies	@	3%		₹ 6.98
					₹ 239.76
	Add for Water charges	@	1%		₹ 2.40
					₹ 242.16
	Add for contractor's profit and overheads	@	15%		₹ 36.32
	Cost of treating of external wall below concrete or masonry for 10m length				₹ 278.48
	Cost per metre				₹ 27.85
	Rate per metre	Say			₹ 27.90

2.20.3	Treatment of soil under plinth filling using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with sand filling:				
2.20.3.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for treatment of 9.0 sqm area of soil under plinth filling with Chlorpyrifos E.C. 20%				
	MATERIALS:				

	Area of treatment = 9 sqm No. of holes = 100 Nos. Distance between holes = 300mm Chlorpyriphos E.C. 1% Concentration 100x1 litre per hole= 100litres Chlorpyriphos E.C. 20% Emulsifiable concentrate required = 100/20 = 5 litres [Cost of chemical paid seperately under Item No. 2.19]				
	LABOUR:				
	1. For drilling 12mm dia. Holes at 300mm c/c				
	2. For injecting chemicals after diluiting the same as required and making good the holes with sand				
0203	Belder	Day	1.20	₹ 300.00	₹ 360.00
					₹ 360.00
	Add for hire charges and maintenance of sprayer & drilling machine, cost of sand filling	@	2%		₹ 7.20
					₹ 367.20
	Add for Sundries and contingencies	@	3%		₹ 11.02
					₹ 378.22
	Add for Water charges	@	1%		₹ 3.78
					₹ 382.00
	Add for contractor's profit and overheads	@	15%		₹ 57.30
	Cost of treating of 9.0 sqm of plinth area				₹ 439.30
	Cost per sqm				₹ 48.81
	Rate per sqm	Say			₹ 48.80

2.20.4	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 fine sand) to match the existing floor:				
2.20.4.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for treatment of 9.0 sqm area of soil under existing floors with Chlorpyriphos E.C. 20%				
	MATERIALS:				
	Area of treatment = 9 sqm No. of holes = 100 Nos. Distance between holes = 300mm Chlorpyriphos E.C. 1% Concentration 100x1 litre per hole= 100litres Chlorpyriphos E.C. 20% Emulsifiable concentrate required = 100/20 = 5 litres [Cost of chemical paid seperately under Item No. 2.19]				
	LABOUR:				
	1. For drilling 12mm dia. Holes at 300mm c/c with electric drilling machine				
	2. For injecting chemicals after diluiting the same as required and making good the holes with cement mortar				
0215	Fitter	Day	0.20	₹ 380.00	₹ 76.00
0203	Belder	Day	2.00	₹ 300.00	₹ 600.00
					₹ 676.00

	Add for hire charges and maintenance of sprayer & drilling machine, cost of cement mortar	@	3%		₹ 20.28
					₹ 696.28
	Add for Sundries and contingencies	@	3%		₹ 20.89
					₹ 717.17
	Add for Water charges	@	1%		₹ 7.17
					₹ 724.34
	Add for contractor's profit and overheads	@	15%		₹ 108.65
	Cost of treating of 9.0 sqm of plinth area				₹ 832.99
	Cost per sqm				₹ 92.55
	Rate per sqm	Say			₹ 92.60

2.20.5	Treatment of existing masonry using chemical emulsion @ one litre per hole at 300 mm interval including drilling holes at 45° and plugging them with cement mortar 1:2 (1 cement: 2 fine sand) to the full depth of the hole:				
2.20.5.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for treatment of 10 m length of existing masonry with Chlorpyrifos E.C. 20%				
	MATERIALS:				
	No. of holes = 34 Nos. Chlorpyrifos E.C. 1% Concentration 34x1 litre per hole= 34litres Chlorpyrifos E.C. 20% Emulsifiable concentrate required = 34/20 = 1.70 litres [Cost of chemical paid seperately under Item No. 2.19]				
	LABOUR:				
	1. For drilling Holes at 300mm c/c with electric drilling machine at 45°				
	2. For injecting chemicals after diluiting the same as required and making good the holes with cement mortar				
0218*	Mason	Day	0.10	₹ 400.00	₹ 40.00
0215	Fitter	Day	0.20	₹ 380.00	₹ 76.00
0203	Belder	Day	0.40	₹ 300.00	₹ 120.00
					₹ 236.00
	Add for hire charges and maintenance of sprayer & drilling machine, cost of cement mortar	@	3%		₹ 7.08
					₹ 243.08
	Add for Sundries and contingencies	@	3%		₹ 7.29
					₹ 250.37
	Add for Water charges	@	1%		₹ 2.50
					₹ 252.87
	Add for contractor's profit and overheads	@	15%		₹ 37.93
	Cost of treating existing masonry for 10.0 m length				₹ 290.80
	Cost per m				₹ 29.08
	Rate per m	Say			₹ 29.10

2.20.6	Treatment at points of contact of wood work by chemical emulsion Chlorpyrifos/ Lindane (in oil or kerosene based solution) @ 0.5 litres per hole by drilling 6 mm dia holes at downward angle of 45° at 150 mm centre to centre and sealing the same.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for treatment of 10 m length on woodwork with Chlorpyrifos E.C. 20%				

	MATERIALS:				
	No. of holes = 68 Nos. Chlorpyriphos E.C. 1% Concentration 68x0.5 litre per hole= 34litres Chlorpyriphos E.C. 20% Emulsifiable concentrate required = 34/20 = 1.70 litres [Cost of chemical paid seperately under Item No. 2.19]				
02004	Kerosene oil 34-1.70 = 32.3 litres	litre	32.30	₹ 48.00	₹ 1,550.40
	LABOUR:				
	1. For drilling Holes at 150mm c/c at 45° and sealing same				
0208*	Carpenter	Day	0.25	₹ 400.00	₹ 100.00
0212	Helper	Day	0.25	₹ 300.00	₹ 75.00
					₹ 1,725.40
	Add for Sundries and contingencies	@	3%		₹ 51.76
					₹ 1,777.16
	Add for Water charges	@	1%		₹ 17.77
					₹ 1,794.93
	Add for contractor's profit and overheads	@	15%		₹ 269.24
	Cost of treating wood work for 10.0 m length				₹ 2,064.17
	Cost per m				₹ 206.42
	Rate per m	Say			₹ 206.40

Note: For Item No. 2.20

The work will be carried out as per IS: 6313 [Latest Revision].

Under the Insecticides Rule 1971: 10(3A) any person who desires to undertake pest control operations will be a Licence holder.

The agency must complying with all safety health and welfare regulations, appertaining to staff and work people employed on the site.

Keeping the site free from debris arising from the works during the work and leave the site free from debris on completion of work to the satisfaction of the Owner.

The agency shall give a 3-year service guarantee in writing supplemented by a seperate and unilateral guarantee from the specialised agency for the job to keep the building free of termites for the specified period at no extra cost of the Owner.

S U B - H E A D - 3



M O R T A R

**SUB HEAD : 3.0 / MORTAR
BASIC RATES**

Code No.	Description	Unit	Rate
0205	Bhisti/Waterman	Day	₹ 300.00
0203	Beldar	Day	₹ 340.00
0224	Mate	Day	₹ 300.00
03001	Cement (Portland)	tonne	₹ 6,100.00
03002	Cement (White)	tonne	₹ 18,000.00
03005	Marble dust/ powder	cum	₹ 3,780.00
03004	Marble chips up to 4mm and downsize White & black	quintal	₹ 541.00
03003	Marble chips large size above 4 mm White & black	quintal	₹ 541.00
03006	Mud (dry)	cum	₹ 28.00
02003	Sand (Fine): Selected quarry	cum	₹ 370.00
03007	Stone dust	cum	₹ 2,600.00
0421	Carriage: Cement	tonne	₹ 110.94
0429	Carriage: Good earth	cum	₹ 184.90
0425	Carriage: Fine Sand	cum	₹ 142.63
0470	Carriage: Stone dust	cum	₹ 130.51
0470	Carriage: Marble dust and marble chips	cum	₹ 130.51

SUB HEAD : 3.0
MORTARS

Note: These rates are exclusive of water charges, overheads & contractor's profit

1. Sand can be either coarse or fine as required/available. Here, provision of fine sand is considered only due to non-availability of coarse sand in Tripura. However, design of mortar dictates for use of coarse sand, then separate analysis may be made as per site condition.
2. Cement and sand can be mixed by hand also if required in small quantity.
3. Ordinary cement 33 grade may be used.
4. Weight of 1 cum of cement = 1.44 t
5. The cement mortar is mixed in a mixer only if large quantities of mortar is required. Otherwise, for all general work labour employed will mix the mortar manually and in such cases the cost towards labour and hire charges of mixer should be deleted and only cost of material is to be taken.

3.1 Cement Mortar

3.1.1 Cement Mortar 1 : 1 (1 cement : 1 fine sand)					
Code	Operational input for preparing 1 cum cement mortar 1 : 1 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 71.25% = 0.7125 cum of cement = 1.026 tonne)				
03001	Cement	tonne	1.026	₹ 6,100.00	₹ 6,258.60
0421	Carriage of Cement	tonne	1.026	₹ 110.94	₹ 113.82
02003	Fine sand	cum	0.7125	₹ 370.00	₹ 263.63
0425	Carriage of Fine sand	cum	0.7125	₹ 142.63	₹ 101.62
	LABOUR:				
	For measuring, carrying, depositing and mixing				
0203	Belder	Day	0.75	₹ 340.00	₹ 255.00
0205	Bhistri	Day	0.07	₹ 300.00	₹ 21.00
					₹ 276.00
	Cost of 1.00 cum				₹ 7,013.67

3.1.2 Cement Mortar 1 : 2 (1 cement : 2 fine sand)					
Code	Operational input for preparing 1 cum cement mortar 1 : 2 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 47.5% = 0.475 cum of cement = 0.684 tonne)				
03001	Cement	tonne	0.684	₹ 6,100.00	₹ 4,172.40
0421	Carriage of Cement	tonne	0.684	₹ 110.94	₹ 75.88
02003	Fine sand	cum	0.950	₹ 370.00	₹ 351.50
0425	Carriage of Fine sand	cum	0.950	₹ 142.63	₹ 135.50
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 5,011.28

3.1.3 Cement Mortar 1 : 3 (1 cement : 3 fine sand)					
Code	Operational input for preparing 1 cum cement mortar 1 : 3 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 35.70% = 0.357 cum of cement = 0.510tonne)				
03001	Cement	tonne	0.510	₹ 6,100.00	₹ 3,111.00

0421	Carriage of Cement	tonne	0.510	₹ 110.94	₹ 56.58
02003	Fine sand	cum	1.070	₹ 370.00	₹ 395.90
0425	Carriage of Fine sand	cum	1.070	₹ 142.63	₹ 152.61
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 3,992.09

3.1.4	Cement Mortar 1 : 4 (1 cement : 4 fine sand)				
Code	Operational input for preparing 1 cum cement mortar 1 : 4 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 26.80% = 0.268 cum of cement = 0.380tonne)				
03001	Cement	tonne	0.380	₹ 6,100.00	₹ 2,318.00
0421	Carriage of Cement	tonne	0.380	₹ 110.94	₹ 42.16
02003	Fine sand	cum	1.070	₹ 370.00	₹ 395.90
0425	Carriage of Fine sand	cum	1.070	₹ 142.63	₹ 152.61
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 3,184.67

3.1.5	Cement Mortar 1 : 5 (1 cement : 5 fine sand)				
Code	Operational input for preparing 1 cum cement mortar 1 : 5 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 21.40% = 0.214 cum of cement = 0.310tonne)				
03001	Cement	tonne	0.310	₹ 6,100.00	₹ 1,891.00
0421	Carriage of Cement	tonne	0.310	₹ 110.94	₹ 34.39
02003	Fine sand	cum	1.070	₹ 370.00	₹ 395.90
0425	Carriage of Fine sand	cum	1.070	₹ 142.63	₹ 152.61
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 2,749.90

3.1.6	Cement Mortar 1 : 6 (1 cement : 6 fine sand)				
Code	Operational input for preparing 1 cum cement mortar 1 : 6 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 17.80% = 0.178 cum of cement = 0.250tonne)				
03001	Cement	tonne	0.250	₹ 6,100.00	₹ 1,525.00
0421	Carriage of Cement	tonne	0.250	₹ 110.94	₹ 27.74
02003	Fine sand	cum	1.070	₹ 370.00	₹ 395.90
0425	Carriage of Fine sand	cum	1.070	₹ 142.63	₹ 152.61
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 2,377.25

3.2 Cement Stone Dust Mortar

3.2.1	Cement Stone Dust Mortar 1 : 2 (1 cement : 2 Stone dust)				
Code	Operational input for preparing 1 cum cement stone dust mortar 1 : 2 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 47.5% = 0.475 cum of cement = 0.684 tonne)				
03001	Cement	tonne	0.684	₹ 6,100.00	₹ 4,172.40
0421	Carriage of Cement	tonne	0.684	₹ 110.94	₹ 75.88
02003	Stone dust	cum	0.950	₹ 2,600.00	₹ 2,470.00
0425	Carriage of stone dust	cum	0.950	₹ 130.51	₹ 123.98
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 7,118.26

3.3 Cement Marble Dust Mortar

3.3.1	Cement Marble Dust Mortar 1 : 2 (1 cement : 2 Marble dust)				
Code	Operational input for preparing 1 cum cement marble dust mortar 1 : 2 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 47.5% = 0.475 cum of cement = 0.684 tonne)				
03001	Cement	tonne	0.684	₹ 6,100.00	₹ 4,172.40
0421	Carriage of Cement	tonne	0.684	₹ 110.94	₹ 75.88
03005	Marble dust	cum	0.950	₹ 3,780.00	₹ 3,591.00
0470	Carriage of Marble dust	cum	0.950	₹ 130.51	₹ 123.98
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 8,239.26

3.3.2	Cement Marble Dust Mortar 1 : 5 (1 cement : 5 Marble dust)				
Code	Operational input for preparing 1 cum cement marble dust mortar 1 : 5 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(Cement required is 21.4% = 0.214 cum of cement = 0.31 tonne)				
03001	Cement	tonne	0.310	₹ 6,100.00	₹ 1,891.00
0421	Carriage of Cement	tonne	0.310	₹ 110.94	₹ 34.39
03005	Marble dust	cum	1.070	₹ 3,780.00	₹ 4,044.60
0470	Carriage of Marble dust	cum	1.070	₹ 130.51	₹ 139.65
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 6,385.64

3.4 White Cement Marble Dust Mortar

3.4.1	White Cement Marble Dust Mortar 1 : 2 (1 White cement : 2 Marble dust)				
Code	Operational input for preparing 1 cum white cement marble dust mortar 1 : 2 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(White Cement required is 47.5% = 0.475 cum of cement = 0.684 tonne)				
03002	White Cement	tonne	0.684	₹ 18,000.00	₹ 12,312.00
0421	Carriage of White Cement	tonne	0.684	₹ 110.94	₹ 75.88
03005	Marble dust	cum	0.950	₹ 3,780.00	₹ 3,591.00
0470	Carriage of Marble dust	cum	0.950	₹ 130.51	₹ 123.98
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 16,378.86

3.4.2	White Cement Marble Dust Mortar 1 : 3 (1 White cement : 3 Marble dust)				
Code	Operational input for preparing 1 cum white cement marble dust mortar 1 : 3 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(White Cement required is 35.7% = 0.357 cum of cement = 0.51 tonne)				
03002	White Cement	tonne	0.510	₹ 18,000.00	₹ 9,180.00
0421	Carriage of White Cement	tonne	0.510	₹ 110.94	₹ 56.58
03005	Marble dust	cum	1.070	₹ 3,780.00	₹ 4,044.60
0470	Carriage of Marble dust	cum	1.070	₹ 130.51	₹ 139.65
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 13,696.83

3.4.3	White Cement Marble Dust Mortar 1 : 5 (1 White cement : 5 Marble dust)				
Code	Operational input for preparing 1 cum white cement marble dust mortar 1 : 5 proportion	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
	(White Cement required is 21.4% = 0.214 cum of cement = 0.31 tonne)				
03002	White Cement	tonne	0.310	₹ 18,000.00	₹ 5,580.00
0421	Carriage of White Cement	tonne	0.310	₹ 110.94	₹ 34.39
03005	Marble dust	cum	1.070	₹ 3,780.00	₹ 4,044.60
0470	Carriage of Marble dust	cum	1.070	₹ 130.51	₹ 139.65
	LABOUR	Same as 3.1.1			₹ 276.00
	Cost of 1.00 cum				₹ 10,074.64

Note:

Add extra @ 5% for labour charges & hire charges, water charges, sundries and contingencies in case of mechanical mixing of mortar.

3.5 Mud Mortar

Code	Operational input for preparing 1 cum mud mortar	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
03006	Mud (dry)	cum	1.200	₹ 28.00	₹ 33.60
0429	Carriage of Mud	tonne	1.920	₹ 184.90	₹ 355.01
	LABOUR				
	For breaking clods, puddling, watering, mixing				
0224	Mate	shift	0.200	₹ 300.00	₹ 60.00
0203	Belder	shift	1.200	₹ 340.00	₹ 408.00
0205	Waterman	shift	0.200	₹ 300.00	₹ 60.00
					₹ 916.61
	Add for Sundries & Contingencies	@	3%		₹ 27.50
	Cost of 1.00 cum				₹ 944.11

S U B - H E A D - 4



C O N C R E T E W O R K

**SUB HEAD : 4.0 / CONCRETE WORK
BASIC RATES**

Code No.	Description	Unit	Rate
0205	Bhisti/Waterman	Day	₹ 300.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0216	Foreman	Day	₹ 425.00
0218*	Mason (average)	Day	₹ 400.00
0208*	Carpenter (average)	Day	₹ 400.00
04001	Brick Aggregate (Single size) : 40 mm nominal size	cum	₹ 2,550.00
04002	Brick Aggregate (Single size) : 20 mm nominal size	cum	₹ 2,975.00
04003	Brick Aggregate (Single size) : 12 mm nominal size	cum	₹ 3,075.00
04004	Stone Aggregate (Single size) : 40 mm nominal size	cum	₹ 3,532.00
04005	Stone Aggregate (Single size) : 25 mm nominal size	cum	₹ 3,969.00
04006	Stone Aggregate (Single size) : 20 mm nominal size	cum	₹ 3,969.00
04007	Stone Aggregate (Single size) : 12 mm nominal size	cum	₹ 4,005.00
04008	Stone Aggregate (Single size) : 10 mm nominal size	cum	₹ 4,040.00
04009	Stone Aggregate (Single size) : 06 mm nominal size	cum	₹ 3,750.00
04010	Local ballies 100/125 mm diameter	metre	₹ 59.00
04011	Paving bitumen S-90 of approved quality	tonne	₹ 36,820.00
03001	Cement (Portland)	tonne	₹ 6,100.00
04012	Coal (steam)	quintal	₹ 890.00
02004	Kerosene oil	litre	₹ 48.00
02003	Sand (Fine): Selected quarry	cum	₹ 370.00
05039	Mild steel round bar above 12 mm dia	quintal	₹ 4,010.00
05056	Structural steel such as tees, angles channels and R.S. joists	quintal	₹ 4,267.00
05026	Flats up to 10 mm in thickness	quintal	₹ 3,992.00
05041	Mild steel sheets for tanks	quintal	₹ 4,532.00
05027	Galvanised steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	₹ 12.00

Code No.	Description	Unit	Rate
05043	Mild stel bolts 6 mm dia and 25 mm long with hexagonal head	10 Nos	₹ 27.00
05053	Straining bolts	each	₹ 79.00
04013	Second class local wood in scantling	10 cudm	₹ 137.00
04014	Second class local wood in planks	10 cudm	₹ 145.00
04015	Water proofing materials	kilogram	₹ 36.00
04016	Double clip (bridge clip)	each	₹ 119.00
04017	Single clip	each	₹ 97.00
04018	M.S. tube 40 mm dia	metre	₹ 328.00
04019	M.S. tube 50 mm dia	metre	₹ 379.00
04020	Column clamp 450x1070 m	each	₹ 1,628.00
0467	Carriage: Steam coal	tonne	₹ 84.57
0405	Carriage: Brick/ Stone aggregate below 40 mm nominal size	cum	₹ 121.78
0473	Carriage: Timber	cum	₹ 61.48
0468	Carriage: Steel	tonne	₹ 84.57
0404	Carriage: Brick/ Stone aggregate 40 mm nominal size and above	cum	₹ 131.68
0421	Carriage: Cement	tonne	₹ 84.57
0472	Carriage: Tar bitumen	tonne	₹ 84.57
0425	Carriage: Fine Sand	cum	₹ 108.73

CEMENT CONCRETE (Cast-in-Situ) ORDINARY MIX-UP TO PLINTH LEVEL

**Quantity of Coarse and Fine Aggregates in concrete Mix with Different Proportions
(Volume Batching)**

The method of finding the quantity of coarse and fine aggregate in concrete with different proportions is discussed below:-

Ordinary Mix (Volume Batching)

The principle of making good concrete is that cement should invariably be batched by weight even though the aggregates are batched by volume. As the bag of cement is weighed at the factory, it is convenient to make the size of the concrete batch such as to require whole bag of cement.

There are, however, two units of capacity-liquids and dry granular materials being measured in litres, and solids in cubic metres. Hence, while water and aggregates are measured in litres the concrete is measured in cubic metres. For all practical purposes 1 cum is equivalent to 1000 litres (one kilo litre).

Hence, the aggregates are measured in litres and not in cubic metres.

As per BIS : 1911-1967 one litre of ordinary Portland cement may be taken to weigh 1.44 kg. A cement bag weighing 50 kg. will, therefore, contain 34.72 litres of ordinary Portland cement. For the sake of convenience the quantity can be rounded off to 35 litres.

Note : It should be specifically noted that the cement when delivered in sealed bags from factory would weigh 50 kgs and would occupy 35 litres in compact state. However when the same cement on removing from bag is batched volumetrically with boxes or tins etc. on site it can never be filled in compact state with the result it so happens that the quantity of cement that is batched, when weighed will not weigh 1.44 kg per litre but it will weigh less by 20 percent.

Hence while executing any type of cement concrete work, the cement should never be batched by volume but should always be used only on bag basis or by weigh otherwise the contractor will be unduly benefited due to the reduced consumption of cement in the work.

The batch volumes and quantity of aggregates required for the particular mix proportion are given below in **Table 3.1**.

Table No.3.1 : Quantity of Agregates required for a Particular concrete Mix

Sl. No.	Mix Proportion nominal Mix	BATCH VOLUME per cum *			Cement required per cum as per CPWD specification Bags	Coarse aggregate in litre per cum	Qty. of coarse & fine aggregates required per cum of concrete		Maximum size of coarse aggregate	Wastage @5%
		Cement kg	Sand litre	Coarse aggregate litre			Coarse aggregate cum	Sand cum		
1	1 : 1 : 2	50	35	70	12.2	12.2x70 =854	0.854	0.427	20 mm	C.A=0.042 S=0.021
2	1 : 1½ : 3	50	52.5	105	8	8x105 =840	0.840	0.42	20 mm	C.A=0.042 S=0.021
3	1 : 2 : 4	50	70	140	6.4	6.4x140 =896	0.896	0.448	20 mm	C.A=0.044 S=0.022
4	1 : 2 : 4	50	70	140	6.4	6.4x140 =896	0.896	0.448	40 mm	C.A=0.044 S=0.022
5	1 : 3 : 6	50	105	210	4.4	4.4x210 =924	0.924	0.462	20 mm	C.A=0.046 S=0.023
6	1 : 3 : 6	50	105	210	4.4	4.4x210 =924	0.924	0.462	40 mm	C.A=0.046 S=0.023
7	1 : 4 : 8	50	140	280	3.4	3.4x280 =952	0.952	0.476	40 mm	C.A=0.0476 S=0.0238
8	1 : 5 : 10	50	175	350	2.6	2.6x350 =910	0.910	0.455	40 mm	C.A=0.045 S=0.022

* To prepare wet concrete the quantity of stone aggregate and sand in dry mix depends mainly on the size of the stone aggregate. The addition of extra quantity of cement for different proportions does not increase the volume of the mix but mainly increases strength of concrete as per Table given in this chapter. However, correct Water-Cement Ratio should be maintained to achieve the required strength.

Table No.3.2 : Quantity of Materials to be Assumed for Rate analysis

Sl. No.	Mix proportion Nominal Mix	Qty. of cement required	Size of coarse aggregate	Qty. calculated as per theoretical requirement		Qty. required after adding 5% wastage		Less quantity due to over size rate analysis		Net quantity for use in rate analysis		Approx quantity of water per 50 kg of cement mix
		quintal	mm	Coarse aggregate	Sand	Coarse aggregate	Sand	Coarse aggregate	Sand	Coarse aggregate	Sand	
1	1 : 1 : 2	6.1	20 mm & 12 mm	0.854	0.427	0.8967	0.4483	----	----	0.90	0.45	27
2	1 : 1½ : 3	4	20 mm & 12 mm	0.84	0.42	0.882	0.441	----	----	0.882	0.441	30

3	1 : 2 : 4 with max size 20 mm aggregate	3.2	20 mm	0.672		0.705		----	----	0.705	0.47	32
			12 mm	0.224	0.448	0.235	0.47	----	----	0.235		
									Total	0.94		
4	1 : 2 : 4 with max size 40 mm aggregate	3.2	40 mm	0.546		0.573		0.0286		0.544	0.47	36
			20 mm	0.23	0.448	0.241	0.47	----	----	0.241		
			12 mm	0.12		0.126		----	----	0.126		
									Total	0.911		
5	1 : 3 : 6 with max size 20 mm aggregate	2.2	20 mm	0.693		0.727		----	----	0.727	0.485	37
			12 mm	0.231	0.462	0.242	0.485	----	----	0.242		
									Total	0.969		
6	1 : 3 : 6 with max size 40 mm aggregate	2.2	40 mm	0.674		0.707		0.035	----	0.672	0.485	40
			20 mm	0.25	0.462	0.262	0.484	----	----	0.262		
									Total	0.934		
7	1 : 4 : 8	1.70	40 mm	0.69		0.7245		0.0362	----	0.6883	0.5	45
			20 mm	0.262	0.476	0.275	0.499	----	----	0.275		
									Total	0.9633		
8	1 : 5 : 10	1.30	40 mm	0.664		0.6972		0.03486	----	0.6623	0.475	60
			20 mm	0.246	0.455	0.2583	0.477	----	----	0.2583		
									Total	0.9206		

Notes :

1. The stone aggregates and sand proposed are all graded aggregate and coarse sand respectively. Stone dust is not recommended for important concrete works.
2. Fine sand may be used for mix 1:3:6 with maximum size of stone aggregate as 40 mm and other lean mixes.
3. Increase in quantity due to bulkage in sand/fine sand may be done at site as the same has not been considered here.

Grading of Coarse Aggregate

To prepare good quality cement concrete we must get a dense mix and to get a dense mix it is essential that the coarse aggregates must be proper grading specially from the maximum size 40 mm/20mm to the minimum size 4.75 mm.

However, CPWD specify the combination of single size aggregates i.e. 20 mm single size coarse aggregate to be missed in a particular proportion with 10 mm single size aggregate which is impracticable, as the building material supplier will not supply the correct single size aggregate. He may supply 20 mm single size aggregate, but the 10 mm single size aggregate would contain lot of grit and stone dust which is not useful for producing good concrete. Therefore, it is advisable to use a combination of 20 mm graded stone aggregate with 12 mm graded stone aggregate, with which one can produce a dense mix.

The production of dense mix depends upon the type and source of coarse aggregate and the engineer-in-charge should decide the addition of the two sizes according to type of materials supplied and by doing trial mixes on site. However, for rough guidance and as per practical experience it is suggested that 3 parts of 20 mm aggregate be mixed with 1 part of 12 mm graded aggregate.

As per theoretical calculations, the quantity of consumption of coarse and fine aggregates and cement is given in Table No.3.1.

The very purpose of rate analysis is to evaluate correct cost, as per actual work in the field/ site considering the difference between theory and practice. The concrete item is comparatively a costly item and besides, 3 or 4 types of loose materials constitute the production of the same, this the unavoidable wastage on site will be much more. The multifold wastage of concrete will be at mixer, as the place of actual casting and also the aggregates at stacking point. It has also been found that in spite of all checks the supplier ultimately succeeds in effecting a short supply. Also in certain suppliers, especially sand has to be screened or even washed and thus the total quantity of sand received on the site will not be enough to produce the concrete and this type of wastage has to be accounted for.

In practice many departments allow 2.5% to 3% theoretical wastage of cement in their quantities of issue when the materials are issued on account departmentally. However, the estimates do not account for the wastage of cement. According to the actual experience on the site, it has been found that if handled and supervised correctly, not wastage on cement need be considered at all. On the other hand the wastage in coarse aggregate and sand is totally unavoidable and minimum 5% wastage towards these two items will have to be considered.

Also some departments proposed a deduction for voids @7.5% at supply point especially for a supply of 40 mm and above size of coarse aggregate but in practice no supplier will agree for deduction of voids.

Further, the larger the size of coarse aggregate, the quantity of coarse aggregate required will lesser by about 5%. This point is also considered in IS : 457-1957 wherein it is stated that, "To effect greatest economy, the concrete should preferably contain the maximum size of aggregate suitable for the place of use and giving the specified strengths."

Therefore, in the theoretical requirement of coarse aggregate especially 40 mm and above a 5% reduction in quantity has been assumed.

Hence, based on the above points, the materials required for various types of mixes are given in Table No.3.2.

SUB HEAD : 4.0
CONCRETE WORK

- Note: 1. Sand can be either coarse or fine as required/available. Here, provision of fine sand is considered only due to non-availability of coarse sand in Tripura. However, design of concrete dictates for use of coarse sand, then separate analysis may be made as per site condition.
2. The quantities of Cement, sand and coarse aggregates are as per Table No. 3.2.
3. Cement concrete with volumetric mix proportion cannot be termed as concrete of specific grade, because as per IS Code, only the design mix grades of concrete are specified as concrete grade M-15, concrete grade M-20 etc. Hence in this case it should be mix proportion 1:1:2, 1:2:4 etc. for batching with specified proportion.
4. The calculations are based on the assumption that 20 cum. to 25 cum. concrete would be laid in a day.
5. The provision of waterman is mainly for feeding water for mixing and other water requirements during concreting.
6. The expenses for curing will be covered by the provision of Water Charges.

CEMENT CONCRETE [CAST-IN-SITU] ORDINARY MIX-UP TO PLINTH LEVEL					
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08
04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 8,272.09
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2%		₹ 165.44
					₹ 8,437.53
	Add for Sundries and contingencies	@	3%		₹ 253.13
					₹ 8,690.66
	Add for water charges	@	1%		₹ 86.91
					₹ 8,777.57
	Add for contractor's profit and overheads	@	15%		₹ 1,316.64
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,094.21
	Rate per cum.	Say			₹ 10,094.20

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				

Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,888.69
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.8%		₹ 124.00
					₹ 7,012.69
	Add for Sundries and contingencies	@	3%		₹ 210.38
					₹ 7,223.07
	Add for water charges	@	1%		₹ 72.23
					₹ 7,295.30
	Add for contractor's profit and overheads	@	15%		₹ 1,094.30
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,389.60
	Rate per cum.	Say			₹ 8,389.60

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				

Code	Discription	Unit	Quantity	Rate	Amount
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,646.69
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.7%		₹ 112.99
					₹ 6,759.68
	Add for Sundries and contingencies	@	3%		₹ 202.79
					₹ 6,962.47
	Add for water charges	@	1%		₹ 69.62
					₹ 7,032.09
	Add for contractor's profit and overheads	@	15%		₹ 1,054.81
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,086.90
	Rate per cum.	Say			₹ 8,086.90

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.4	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04004	Stone aggregate 40mm	cum	0.544	₹ 3,532.00	₹ 1,921.41
04006	Stone aggregate 20mm	cum	0.241	₹ 3,969.00	₹ 956.53
04007	Stone aggregate 12mm	cum	0.126	₹ 4,005.00	₹ 504.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0404	Stone aggregate 40mm	cum	0.544	₹ 172.74	₹ 93.97
0405	Stone aggregate 20mm and 12mm	cum	0.367	₹ 159.75	₹ 58.63
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,365.11
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.7%		₹ 108.21

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 6,473.32
	Add for Sundries and contingencies	@	3%		₹ 194.20
					₹ 6,667.52
	Add for water charges	@	1%		₹ 66.68
					₹ 6,734.20
	Add for contractor's profit and overheads	@	15%		₹ 1,010.13
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,744.33
	Rate per cum.	Say			₹ 7,744.30

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.5	1:3:6 (1 Cement: 3 fine sand : 6 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.727	₹ 3,969.00	₹ 2,885.46
04007	Stone aggregate 12mm	cum	0.242	₹ 4,005.00	₹ 969.21
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
	CARRIAGE				
0405	Stone aggregate	cum	0.969	₹ 159.75	₹ 154.80
0425	Fine sand	cum	0.485	₹ 142.63	₹ 69.18
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,226.01
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.6%		₹ 99.62
					₹ 6,325.63
	Add for Sundries and contingencies	@	3%		₹ 189.77
					₹ 6,515.40
	Add for water charges	@	1%		₹ 65.15
					₹ 6,580.55
	Add for contractor's profit and overheads	@	15%		₹ 987.08
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,567.63
	Rate per cum.	Say			₹ 7,567.60
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				

Code	Discription	Unit	Quantity	Rate	Amount
4.1.6	1:3:6 (1 Cement: 3 fine sand : 6 graded stone aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04004	Stone aggregate 40mm	cum	0.672	₹ 3,532.00	₹ 2,373.50
04006	Stone aggregate 20mm	cum	0.262	₹ 3,969.00	₹ 1,039.88
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
	CARRIAGE				
0404	Stone aggregate 40mm	cum	0.672	₹ 172.74	₹ 116.08
0405	Stone aggregate 20mm	cum	0.262	₹ 159.75	₹ 41.85
0425	Fine sand	cum	0.485	₹ 142.63	₹ 69.18
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,787.85
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.6%		₹ 92.61
					₹ 5,880.46
	Add for Sundries and contingencies	@	3%		₹ 176.41
					₹ 6,056.87
	Add for water charges	@	1%		₹ 60.57
					₹ 6,117.44
	Add for contractor's profit and overheads	@	15%		₹ 917.62
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,035.06
	Rate per cum.	Say			₹ 7,035.10

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.7	1:4:8 (1 Cement: 4 fine sand : 8 graded stone aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04004	Stone aggregate 40mm	cum	0.6883	₹ 3,532.00	₹ 2,431.08
04006	Stone aggregate 20mm	cum	0.275	₹ 3,969.00	₹ 1,091.48
02003	Fine sand	cum	0.5	₹ 370.00	₹ 185.00
03001	Cement	tonne	0.17	₹ 6,100.00	₹ 1,037.00
	CARRIAGE				

Code	Discription	Unit	Quantity	Rate	Amount
0404	Stone aggregate 40mm	cum	0.6883	₹ 172.74	₹ 118.90
0405	Stone aggregate 20mm	cum	0.275	₹ 159.75	₹ 43.93
0425	Fine sand	cum	0.5	₹ 142.63	₹ 71.32
0421	Cement	tonne	0.17	₹ 110.94	₹ 18.86
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (F)	Day	0.65	₹ 300.00	₹ 195.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,496.32
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2.00%		₹ 109.93
					₹ 5,606.25
	Add for Sundries and contingencies	@	3%		₹ 168.19
					₹ 5,774.44
	Add for water charges	@	1%		₹ 57.74
					₹ 5,832.18
	Add for contractor's profit and overheads	@	15%		₹ 874.83
	Cost of providing and laying 1 cum. of cement concrete				₹ 6,707.01
	Rate per cum.	Say			₹ 6,707.00

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.7	1:5:10 (1 Cement: 5 fine sand : 10 graded stone aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04004	Stone aggregate 40mm	cum	0.6623	₹ 3,532.00	₹ 2,339.24
04006	Stone aggregate 20mm	cum	0.2583	₹ 3,969.00	₹ 1,025.19
02003	Fine sand	cum	0.475	₹ 370.00	₹ 175.75
03001	Cement	tonne	0.13	₹ 6,100.00	₹ 793.00
	CARRIAGE				
0404	Stone aggregate 40mm	cum	0.6623	₹ 172.74	₹ 114.41
0405	Stone aggregate 20mm	cum	0.2583	₹ 159.75	₹ 41.26
0425	Fine sand	cum	0.475	₹ 142.63	₹ 67.75
0421	Cement	tonne	0.13	₹ 110.94	₹ 14.42
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (F)	Day	0.65	₹ 300.00	₹ 195.00

Code	Discription	Unit	Quantity	Rate	Amount
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,069.77
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2.35%		₹ 119.14
					₹ 5,188.91
	Add for Sundries and contingencies	@	3%		₹ 155.67
					₹ 5,344.58
	Add for water charges	@	1%		₹ 53.45
					₹ 5,398.03
	Add for contractor's profit and overheads	@	15%		₹ 809.70
	Cost of providing and laying 1 cum. of cement concrete				₹ 6,207.73
	Rate per cum.	Say			₹ 6,207.70

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.8	1:1:2 (1 Cement: 1 fine sand : 2 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.675	₹ 2,975.00	₹ 2,008.13
04003	Brick aggregate 12mm	cum	0.225	₹ 3,075.00	₹ 691.88
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Brick aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 7,391.89
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2%		₹ 147.84
					₹ 7,539.73
	Add for Sundries and contingencies	@	3%		₹ 226.19
					₹ 7,765.92
	Add for water charges	@	1%		₹ 77.66
					₹ 7,843.58
	Add for contractor's profit and overheads	@	15%		₹ 1,176.54

Code	Discription	Unit	Quantity	Rate	Amount
	Cost of providing and laying 1 cum. of cement concrete				₹ 9,020.12
	Rate per cum.	Say			₹ 9,020.10

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.9	1:1½:3 (1 Cement: 1½ fine sand : 3 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.6615	₹ 2,975.00	₹ 1,967.96
04003	Brick aggregate 12mm	cum	0.2205	₹ 3,075.00	₹ 678.04
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Brick aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,026.10
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.8%		₹ 108.47
					₹ 6,134.57
	Add for Sundries and contingencies	@	3%		₹ 184.04
					₹ 6,318.61
	Add for water charges	@	1%		₹ 63.19
					₹ 6,381.80
	Add for contractor's profit and overheads	@	15%		₹ 957.27
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,339.07
	Rate per cum.	Say			₹ 7,339.10

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.10	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				

Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,727.37
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.7%		₹ 97.37
					₹ 5,824.74
	Add for Sundries and contingencies	@	3%		₹ 174.74
					₹ 5,999.48
	Add for water charges	@	1%		₹ 59.99
					₹ 6,059.47
	Add for contractor's profit and overheads	@	15%		₹ 908.92
	Cost of providing and laying 1 cum. of cement concrete				₹ 6,968.39
	Rate per cum.	Say			₹ 6,968.40

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.11	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04001	Brick aggregate 40mm	cum	0.544	₹ 2,550.00	₹ 1,387.20
04002	Brick aggregate 20mm	cum	0.241	₹ 2,975.00	₹ 716.98
04003	Brick aggregate 12mm	cum	0.126	₹ 3,075.00	₹ 387.45
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0404	Brick aggregate 40mm	cum	0.544	₹ 172.74	₹ 93.97
0405	Brick aggregate 20mm and 12mm	cum	0.367	₹ 159.75	₹ 58.63
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50

Code	Discription	Unit	Quantity	Rate	Amount
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,474.17
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.7%		₹ 93.06
					₹ 5,567.23
	Add for Sundries and contingencies	@	3%		₹ 167.02
					₹ 5,734.25
	Add for water charges	@	1%		₹ 57.34
					₹ 5,791.59
	Add for contractor's profit and overheads	@	15%		₹ 868.74
	Cost of providing and laying 1 cum. of cement concrete				₹ 6,660.33
	Rate per cum.	Say			₹ 6,660.30

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.12	1:3:6 (1 Cement: 3 fine sand : 6 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.727	₹ 2,975.00	₹ 2,162.83
04003	Brick aggregate 12mm	cum	0.242	₹ 3,075.00	₹ 744.15
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
	CARRIAGE				
0405	Brick aggregate	cum	0.969	₹ 159.75	₹ 154.80
0425	Fine sand	cum	0.485	₹ 142.63	₹ 69.18
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,278.32
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.6%		₹ 84.45
					₹ 5,362.77
	Add for Sundries and contingencies	@	3%		₹ 160.88

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 5,523.65
	Add for water charges	@	1%		₹ 55.24
					₹ 5,578.89
	Add for contractor's profit and overheads	@	15%		₹ 836.83
	Cost of providing and laying 1 cum. of cement concrete				₹ 6,415.72
	Rate per cum.	Say			₹ 6,415.70

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.13	1:3:6 (1 Cement: 3 fine sand : 6 graded well burnt brick aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04001	Brick aggregate 40mm	cum	0.672	₹ 2,550.00	₹ 1,713.60
04002	Brick aggregate 20mm	cum	0.262	₹ 2,975.00	₹ 779.45
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
	CARRIAGE				
0404	Brick aggregate 40mm	cum	0.672	₹ 172.74	₹ 116.08
0405	Brick aggregate 20mm	cum	0.262	₹ 159.75	₹ 41.85
0425	Fine sand	cum	0.485	₹ 142.63	₹ 69.18
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 4,867.52
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.6%		₹ 77.88
					₹ 4,945.40
	Add for Sundries and contingencies	@	3%		₹ 148.36
					₹ 5,093.76
	Add for water charges	@	1%		₹ 50.94
					₹ 5,144.70
	Add for contractor's profit and overheads	@	15%		₹ 771.71
	Cost of providing and laying 1 cum. of cement concrete				₹ 5,916.41
	Rate per cum.	Say			₹ 5,916.40

4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				

Code	Discription	Unit	Quantity	Rate	Amount
4.1.14	1:4:8 (1 Cement: 4 fine sand : 8 graded well burnt brick aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04001	Brick aggregate 40mm	cum	0.6883	₹ 2,550.00	₹ 1,755.17
04002	Brick aggregate 20mm	cum	0.275	₹ 2,975.00	₹ 818.13
02003	Fine sand	cum	0.5	₹ 370.00	₹ 185.00
03001	Cement	tonne	0.17	₹ 6,100.00	₹ 1,037.00
	CARRIAGE				
0404	Brick aggregate 40mm	cum	0.6883	₹ 172.74	₹ 118.90
0405	Brick aggregate 20mm	cum	0.275	₹ 159.75	₹ 43.93
0425	Fine sand	cum	0.5	₹ 142.63	₹ 71.32
0421	Cement	tonne	0.17	₹ 110.94	₹ 18.86
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (F)	Day	0.65	₹ 300.00	₹ 195.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 4,547.06
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2.0%		₹ 90.94
					₹ 4,638.00
	Add for Sundries and contingencies	@	3%		₹ 139.14
					₹ 4,777.14
	Add for water charges	@	1%		₹ 47.77
					₹ 4,824.91
	Add for contractor's profit and overheads	@	15%		₹ 723.74
	Cost of providing and laying 1 cum. of cement concrete				₹ 5,548.65
	Rate per cum.	Say			₹ 5,548.70
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering -				
	-All work upto plinth level:				
4.1.7	1:5:10 (1 Cement: 5 fine sand : 10 graded well burnt brick aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04001	Brick aggregate 40mm	cum	0.6623	₹ 2,550.00	₹ 1,688.87
04002	Brick aggregate 20mm	cum	0.2583	₹ 2,975.00	₹ 768.44
02003	Fine sand	cum	0.475	₹ 370.00	₹ 175.75
03001	Cement	tonne	0.13	₹ 6,100.00	₹ 793.00
	CARRIAGE				

Code	Discription	Unit	Quantity	Rate	Amount
0404	Brick aggregate 40mm	cum	0.6623	₹ 172.74	₹ 114.41
0405	Brick aggregate 20mm	cum	0.2583	₹ 159.75	₹ 41.26
0425	Fine sand	cum	0.475	₹ 142.63	₹ 67.75
0421	Cement	tonne	0.13	₹ 110.94	₹ 14.42
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (F)	Day	0.65	₹ 300.00	₹ 195.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 4,162.65
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2.35%		₹ 97.82
					₹ 4,260.47
	Add for Sundries and contingencies	@	3%		₹ 127.81
					₹ 4,388.28
	Add for water charges	@	1%		₹ 43.88
					₹ 4,432.16
	Add for contractor's profit and overheads	@	15%		₹ 664.82
	Cost of providing and laying 1 cum. of cement concrete				₹ 5,096.98
	Rate per cum.	Say			₹ 5,097.00

CEMENT CONCRETE [CAST-IN-SITU] ORDINARY MIX IN SUPERSTRUCTURE

4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08
04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00

Code	Discription	Unit	Quantity	Rate	Amount
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 8,636.84
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	2.25%		₹ 194.33
					₹ 8,831.17
	Add for Scaffoldings	@	1%		₹ 88.31
					₹ 8,919.48
	Add for Sundries and contingencies	@	3%		₹ 267.58
					₹ 9,187.06
	Add for water charges	@	1%		₹ 91.87
					₹ 9,278.93
	Add for contractor's profit and overheads	@	15%		₹ 1,391.84
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,670.77
	Rate per cum.	Say			₹ 10,670.80

4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 7,253.44
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3%		₹ 217.60
					₹ 7,471.04
	Add for Scaffoldings	@	1.25%		₹ 93.39
					₹ 7,564.43

Code	Discription	Unit	Quantity	Rate	Amount
	Add for Sundries and contingencies	@	3%		₹ 226.93
					₹ 7,791.36
	Add for water charges	@	1%		₹ 77.91
					₹ 7,869.27
	Add for contractor's profit and overheads	@	15%		₹ 1,180.39
	Cost of providing and laying 1 cum. of cement concrete				₹ 9,049.66
	Rate per cum.	Say			₹ 9,049.70

4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 7,011.44
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3.25%		₹ 227.87
					₹ 7,239.31
	Add for Scaffoldings	@	1.30%		₹ 94.11
					₹ 7,333.42
	Add for Sundries and contingencies	@	3%		₹ 220.00
					₹ 7,553.42
	Add for water charges	@	1%		₹ 75.53
					₹ 7,628.95
	Add for contractor's profit and overheads	@	15%		₹ 1,144.34
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,773.29
	Rate per cum.	Say			₹ 8,773.30

Code	Discription	Unit	Quantity	Rate	Amount
4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.4	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04004	Stone aggregate 40mm	cum	0.544	₹ 3,532.00	₹ 1,921.41
04006	Stone aggregate 20mm	cum	0.241	₹ 3,969.00	₹ 956.53
04007	Stone aggregate 12mm	cum	0.126	₹ 4,005.00	₹ 504.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0404	Stone aggregate 40mm	cum	0.544	₹ 172.74	₹ 93.97
0405	Stone aggregate 20mm and 12mm	cum	0.367	₹ 159.75	₹ 58.63
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,657.11
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3.80%		₹ 252.97
					₹ 6,910.08
	Add for Scaffoldings	@	1.55%		₹ 107.11
					₹ 7,017.19
	Add for Sundries and contingencies	@	3%		₹ 210.52
					₹ 7,227.71
	Add for water charges	@	1%		₹ 72.28
					₹ 7,299.99
	Add for contractor's profit and overheads	@	15%		₹ 1,095.00
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,394.99
	Rate per cum.	Say			₹ 8,395.00

4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.5	1:3:6 (1 Cement: 3 fine sand : 6 graded stone aggregate 20 mm nominal size)				

Code	Discription	Unit	Quantity	Rate	Amount
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.727	₹ 3,969.00	₹ 2,885.46
04007	Stone aggregate 12mm	cum	0.242	₹ 4,005.00	₹ 969.21
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
	CARRIAGE				
0405	Stone aggregate	cum	0.969	₹ 159.75	₹ 154.80
0425	Fine sand	cum	0.485	₹ 142.63	₹ 69.18
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,518.01
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3.80%		₹ 247.68
					₹ 6,765.69
	Add for Scaffoldings	@	1.55%		₹ 104.87
					₹ 6,870.56
	Add for Sundries and contingencies	@	3%		₹ 206.12
					₹ 7,076.68
	Add for water charges	@	1%		₹ 70.77
					₹ 7,147.45
	Add for contractor's profit and overheads	@	15%		₹ 1,072.12
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,219.57
	Rate per cum.	Say			₹ 8,219.60

4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.6	1:3:6 (1 Cement: 3 fine sand : 6 graded stone aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04004	Stone aggregate 40mm	cum	0.672	₹ 3,532.00	₹ 2,373.50
04006	Stone aggregate 20mm	cum	0.262	₹ 3,969.00	₹ 1,039.88
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00

Code	Discription	Unit	Quantity	Rate	Amount
	CARRIAGE				
0404	Stone aggregate 40mm	cum	0.672	₹ 172.74	₹ 116.08
0405	Stone aggregate 20mm	cum	0.262	₹ 159.75	₹ 41.85
0425	Fine sand	cum	0.485	₹ 142.63	₹ 69.18
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,079.85
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3.90%		₹ 237.11
					₹ 6,316.96
	Add for Scaffoldings	@	1.60%		₹ 101.07
					₹ 6,418.03
	Add for Sundries and contingencies	@	3%		₹ 192.54
					₹ 6,610.57
	Add for water charges	@	1%		₹ 66.11
					₹ 6,676.68
	Add for contractor's profit and overheads	@	15%		₹ 1,001.50
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,678.18
	Rate per cum.	Say			₹ 7,678.20
4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.7	1:1:2 (1 Cement: 1 fine sand : 2 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.675	₹ 2,975.00	₹ 2,008.13
04003	Brick aggregate 12mm	cum	0.225	₹ 3,075.00	₹ 691.88
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Brick aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00

Code	Discription	Unit	Quantity	Rate	Amount
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 7,756.64
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	2.25%		₹ 174.52
					₹ 7,931.16
	Add for Scaffoldings	@	1%		₹ 79.31
					₹ 8,010.47
	Add for Sundries and contingencies	@	3%		₹ 240.31
					₹ 8,250.78
	Add for water charges	@	1%		₹ 82.51
					₹ 8,333.29
	Add for contractor's profit and overheads	@	15%		₹ 1,249.99
	Cost of providing and laying 1 cum. of cement concrete				₹ 9,583.28
	Rate per cum.	Say			₹ 9,583.30

4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.8	1:1½:3 (1 Cement: 1½ fine sand : 3 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.6615	₹ 2,975.00	₹ 1,967.96
04003	Brick aggregate 12mm	cum	0.2205	₹ 3,075.00	₹ 678.04
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Brick aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,390.85
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3%		₹ 191.73

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 6,582.58
	Add for Scaffoldings	@	1.25%		₹ 82.28
					₹ 6,664.86
	Add for Sundries and contingencies	@	3%		₹ 199.95
					₹ 6,864.81
	Add for water charges	@	1%		₹ 68.65
					₹ 6,933.46
	Add for contractor's profit and overheads	@	15%		₹ 1,040.02
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,973.48
	Rate per cum.	Say			₹ 7,973.50

4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.9	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,092.12
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3.25%		₹ 197.99
					₹ 6,290.11
	Add for Scaffoldings	@	1.30%		₹ 81.77
					₹ 6,371.88
	Add for Sundries and contingencies	@	3%		₹ 191.16
					₹ 6,563.04
	Add for water charges	@	1%		₹ 65.63
					₹ 6,628.67

Code	Discription	Unit	Quantity	Rate	Amount
	Add for contractor's profit and overheads	@	15%		₹ 994.30
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,622.97
	Rate per cum.	Say			₹ 7,623.00

4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.1.10	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04001	Brick aggregate 40mm	cum	0.544	₹ 2,550.00	₹ 1,387.20
04002	Brick aggregate 20mm	cum	0.241	₹ 2,975.00	₹ 716.98
04003	Brick aggregate 12mm	cum	0.126	₹ 3,075.00	₹ 387.45
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0404	Brick aggregate 40mm	cum	0.544	₹ 172.74	₹ 93.97
0405	Brick aggregate 20mm and 12mm	cum	0.367	₹ 159.75	₹ 58.63
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.180	₹ 400.00	₹ 72.00
0203	Beldar (M)	Day	1.250	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.250	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,766.17
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3.80%		₹ 219.11
					₹ 5,985.28
	Add for Scaffoldings	@	1.55%		₹ 92.77
					₹ 6,078.05
	Add for Sundries and contingencies	@	3%		₹ 182.34
					₹ 6,260.39
	Add for water charges	@	1%		₹ 62.60
					₹ 6,322.99
	Add for contractor's profit and overheads	@	15%		₹ 948.45
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,271.44
	Rate per cum.	Say			₹ 7,271.40

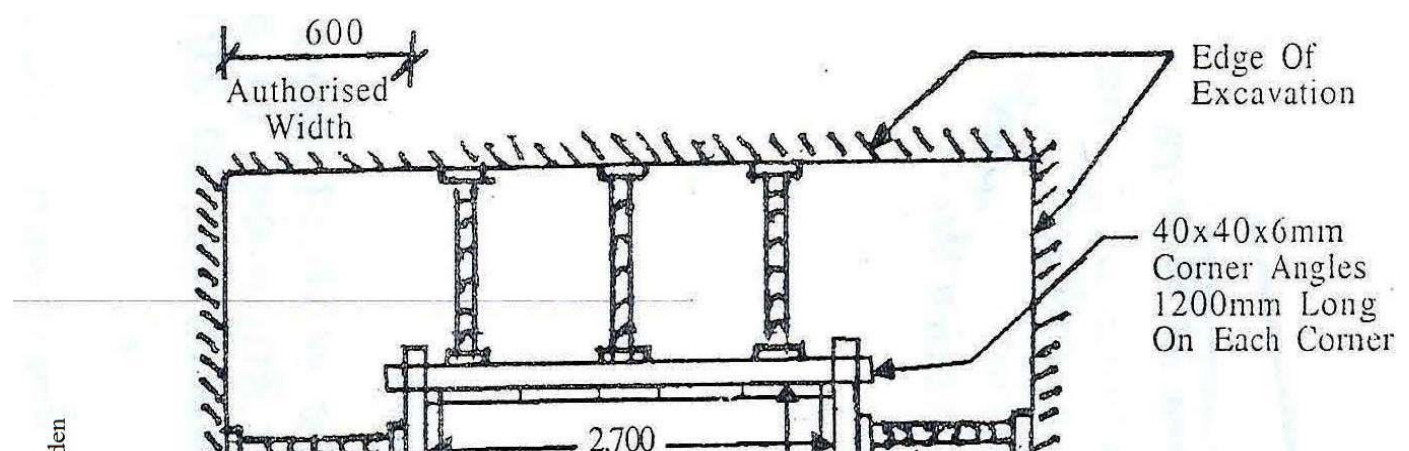
Code	Discription	Unit	Quantity	Rate	Amount
4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.11	1:3:6 (1 Cement: 3 fine sand : 6 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.727	₹ 2,975.00	₹ 2,162.83
04003	Brick aggregate 12mm	cum	0.242	₹ 3,075.00	₹ 744.15
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
	CARRIAGE				
0405	Brick aggregate	cum	0.969	₹ 159.75	₹ 154.80
0425	Fine sand	cum	0.485	₹ 142.63	₹ 69.18
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,278.32
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3.80%		₹ 200.58
					₹ 5,478.90
	Add for Scaffoldings	@	1.55%		₹ 84.92
					₹ 5,563.82
	Add for Sundries and contingencies	@	3%		₹ 166.91
					₹ 5,730.73
	Add for water charges	@	1%		₹ 57.31
					₹ 5,788.04
	Add for contractor's profit and overheads	@	15%		₹ 868.21
	Cost of providing and laying 1 cum. of cement concrete				₹ 6,656.25
	Rate per cum.	Say			₹ 6,656.30

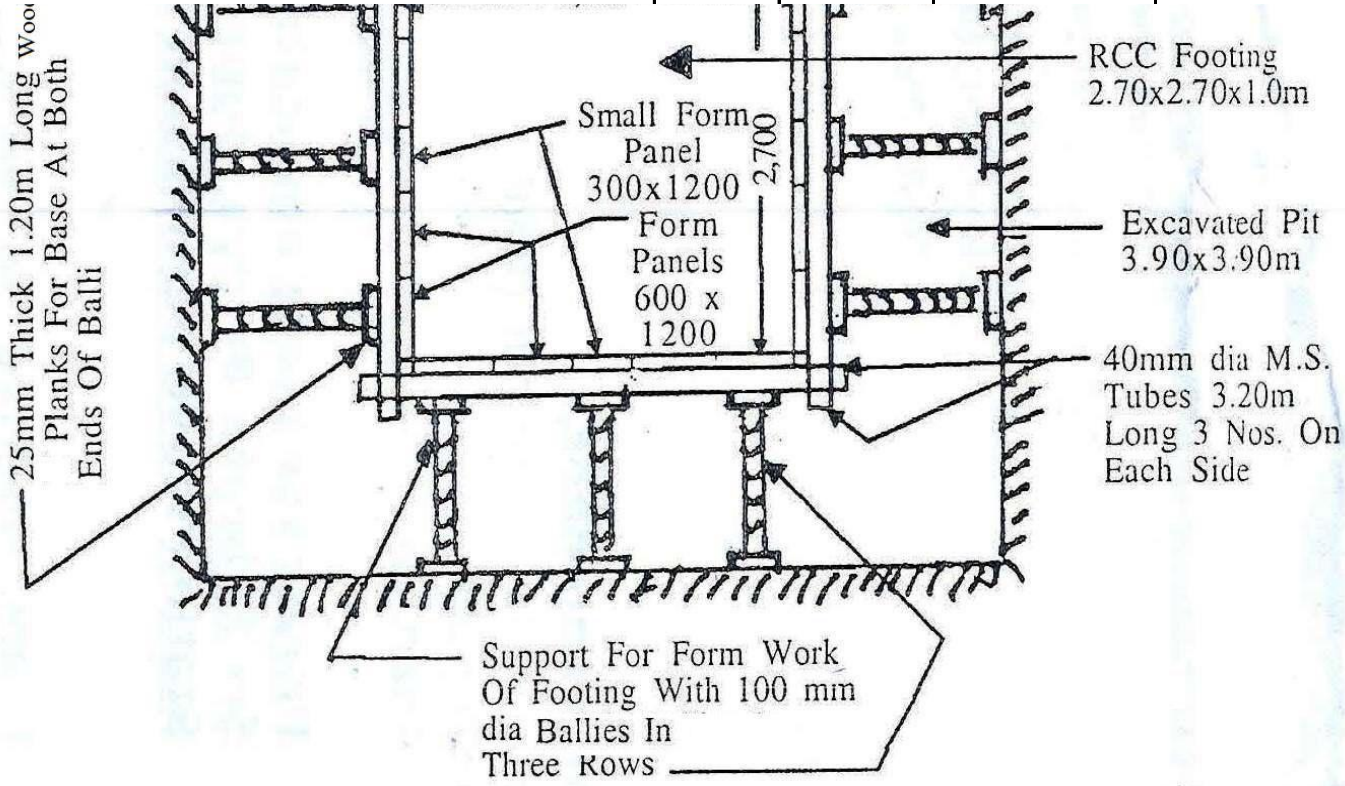
4.2	Providing and laying cement concrete in retaining walls, return walls (any thick-ness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring shuttering and finishing -				
4.2.12	1:3:6 (1 Cement: 3 fine sand : 6 graded well burnt brick aggregate 40 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				

Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
04001	Brick aggregate 40mm	cum	0.672	₹ 2,550.00	₹ 1,713.60
04002	Brick aggregate 20mm	cum	0.262	₹ 2,975.00	₹ 779.45
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
	CARRIAGE				
0404	Brick aggregate 40mm	cum	0.672	₹ 172.74	₹ 116.08
0405	Brick aggregate 20mm	cum	0.262	₹ 159.75	₹ 41.85
0425	Fine sand	cum	0.485	₹ 142.63	₹ 69.18
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 4,867.52
	Add cost of hire and running charges of mixer, vibrator, water pump, lift or crane etc.	@	3.90%		₹ 189.83
					₹ 5,057.35
	Add for Scaffoldings	@	1.60%		₹ 80.92
					₹ 5,138.27
	Add for Sundries and contingencies	@	3%		₹ 154.15
					₹ 5,292.42
	Add for water charges	@	1%		₹ 52.92
					₹ 5,345.34
	Add for contractor's profit and overheads	@	15%		₹ 801.80
	Cost of providing and laying 1 cum. of cement concrete				₹ 6,147.14
	Rate per cum.	Say			₹ 6,147.10

FORM WORK [CENTERING AND SHUTTERING]

4.3	Centering shuttering including struttings, propping etc. and removal of form work for:
4.3.1	Foundations, footings, bases for columns.



Code	Discription	Unit	Quantity	Rate	Amount
	 25mm Thick 1.20m Long Wood Planks For Base At Both Ends Of Balli Small Form Panel 300x1200 Form Panels 600 x 1200 2.700 RCC Footing 2.70x2.70x1.0m Excavated Pit 3.90x3.90m 40mm dia M.S. Tubes 3.20m Long 3 Nos. On Each Side Support For Form Work Of Footing With 100 mm dia Ballies In Three Rows				
	Note: Form Pannels: The form pannels or the shuttering plates are directly in contact with concrete and in spite of best maintenance the face of forms gets dented etc. and after use of aboe 100 to 150 times the surface would be so bad that the result would be most unsatisfactory. Hence, in calculations let us consider that we can use the form pannels for 120 repetitions. However, all other materials like MS Tubes, clamps, bolts and nuts etc. which are not in direct contact with concrete can be used 200 times or more. Hence, for all such materials let us restrict the use for 200 times. In any case the salvage value of all these materials can be taken as 25%. - No separate provision for maintenance is being made as the labour component for fixing and releasing the form-work would cover the same. - The calculations are based on the assumption that the form pannels/shuttering plates are manufactured in a local workshop and are not the ready made materials manufactured by big factories, the cost of which would be prohibitive. - The footing box is 1.2m high and the height of casting is 1m. The quantity of concrete in the box is 9.63 cum which will exert a tremendous pressure on the sides especially when vibrated, thus, fixing a form-work for footing with just one or two pipe supports would not suffice but minimum 3 rows of supports are required to support the form-work otherwise the shutters of the form-work would bulge or even give way. Hence, to resist the pressure on the concrete surface of 1.00 m height supports at 3 places will have to be provided. Also, the pipes should project beyond the boxes so that the pipes are clamped together to make one firm unit. - However, the steel shutteing backed with pipe will not be stable because the labour will be working alround and also inspite of supporting the shutters with three rows of pipes on each side, still there is every chance of box getting twisted due to the heavy quantity of concrete. Hence, the pipes must be supported with MS pipes or ballies. Also, as the supports are being provided totally from outside the form work of footings there cannot be any objectionfrom the officials for using wooden ballies and planks. Hence, the shutters on all sides can be supported by ballies, by taking the supportof sides of excavation. Again all the ballies cannot be fixed directly to the shutters on one side and excavated side on the other side the 25 mm thick timber planks of 1 m height are provided on both sides of the ball over which the ballies will rested. - Labour component will cover fixing shutters, cleaning and oiling shutters, on releasing after every operation and finally cleaning the shutters, oiling and stacking neatly in stacking yard or stores on completion of work.				
Code	Discription	Unit	Quantity	Rate	Amount
	Size of footing: 2.70x2.70x1.00m				
	Contact area: 4x2.70x1.00 = 10.80 sqm				
	MATERIALS				

Code	Discription	Unit	Quantity	Rate	Amount
05041	MS sheet 14 gauge required for main forms and small forms: 4x4x0.60x1.20 = 11.52 sqm 4x1x0.30x1.00 = 1.20 sqm Total = 12.72 sqm Add for wastage = 1.28 sqm Net total = 14.00 sqm Wt. of MS sheets 14 sqm @ 15.70kg/sqm = 14x15.70 = 2.20q	q	2.200	₹ 4,532.00	₹ 9,970.40
05056	40x40x6 mm Angle iron for backing: Vertical: 4x4x2x1.20 = 38.40m 4x1x2x1.00 = 8.00m Horizontals: 4x4x4x0.60 = 38.40m 4x1x4x0.30 = 4.80m Total = 89.60m @3.50kg/m =313.60kg Add for wastage = 17.90kg Net total = 331.50kg = 3.315 q	q	3.315	₹ 4,267.00	₹ 14,145.11
05056	40x40x6 mm Corner Angle: 4x1.20 = 4.80m Add for wastage = 0.20m Total = 5.00m @3.50kg/m =17.50kg=0.175 q	q	0.175	₹ 4,267.00	₹ 746.73
0468	Carriage of steel	tonne	0.569	₹ 110.94	₹ 63.12
MR	Cost of manufacturing [form panels/shuttering plates to cover 12.72 sqm]	q	5.30	₹ 850.00	₹ 4,505.00
					₹ 29,430.36
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 245.25
	Considering the salvage value as 25% Net cost =	75%	of	₹ 245.25	₹ 183.94
04018	MS Pipes 40 mm dia.=4x3x3.25 = 39.00m	m	39.00	₹ 328.00	₹ 12,792.00
04016	Double couplers [Needed to clamp the pipes at ends = 4x3=12 Nos.]	Nos.	12	₹ 119.00	₹ 1,428.00
04017	Single couplers [Needed to fix the shutters (form panels) with the pipes=4x2x3=24 Nos.]	Nos.	24	₹ 97.00	₹ 2,328.00
05043	6 mm bolts and nuts with washers : 30 mm long The shutters have to be bolted with each other. The bolt holes are generally provided at 150 mmc/c. Thus, bolts for each joint : 8 Nos. Total no. of bolts required =4x6x8=192Nos.	10 Nos.	192	₹ 27.00	₹ 518.40
0468	Carriage: Pipes = 39mx4.43 kg/m=172.77 kg 6mm = 6.30kg Total = 179.07kg=0.179tonnes	tonne	0.179	₹ 110.94	₹ 19.86
					₹ 17,086.26
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 85.43
	Considering the salvage value as 25% Net cost =	75%	of	₹ 85.43	₹ 64.07

Code	Discription	Unit	Quantity	Rate	Amount
	Timber planks and ballies:				
04014	a) 25 mm thick kail II planks for base: 4x2x3x3=72 Nos.=72x1x0.225x0.025 = 0.405 cum = 405 cudm	10 cudm	405.00	₹ 145.00	₹ 5,872.50
04010	b) 100mm Ø safeda ballies for support =4x3x3=36 Nos.=36x0.50=18.0m.	m	18.00	₹ 59.00	₹ 1,062.00
0473	Carriage planks and ballies	cum	0.545	₹ 80.65	₹ 43.95
					₹ 6,978.45
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 139.57
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0208*	Carpenter	Day	2.00	₹ 400.00	₹ 800.00
0212	Helper	Day	2.50	₹ 300.00	₹ 750.00
					₹ 2,043.83
	Add for shuttering oil etc	@	5%		₹ 91.97
					₹ 2,135.80
	Add for Sundries and contingencies	@	3%		₹ 64.07
					₹ 2,199.87
	Add for contractor's profit and overheads	@	15%		₹ 329.98
	Cost of formwork for footing for 10.8 sqm. Area				₹ 2,529.85
	Cost of formwork per sqm				₹ 234.25
	Rate per sqm.	Say			₹ 234.30

4.3	Centering shuttering including struttings, propping etc. and removal of form work for:
4.3.2	Retaining walls, return walls, walls (any thickness) including attached pilasters, but-tresses plinth and string courses fillets etc.
	Final Shape Of Retaining Wall When Concreted To Full Height 350 40 x 6mm M.S. Flats As Spacers Fixed On Top Of Shutters 12mm dia Through Bolts To Tie The Shutters On Two Sides 40x40x6mm Angle Iron Fixed Through To Embedded Bolts To Rest The Shutters Of 2nd Lift M.S. Brackets Fixed To Embedded Bolts To Serve As Scaffolding To Work On Further Lifts 75mm Thick Starter 500 Shuttering For 1st Lift Shuttering For 2nd And Subsequent Lifts 10mm dia Bolts To Fix The Spacers Wall Shutters For 2nd Lift Hand Railing For Brackets Bolts Used For Fixing Shutters Are Used To Fix The Brackets Concrete Laid For 1st Lift M.S. Channels Fixed Over Shutters On Both Sides And Tightened With Through Bolts

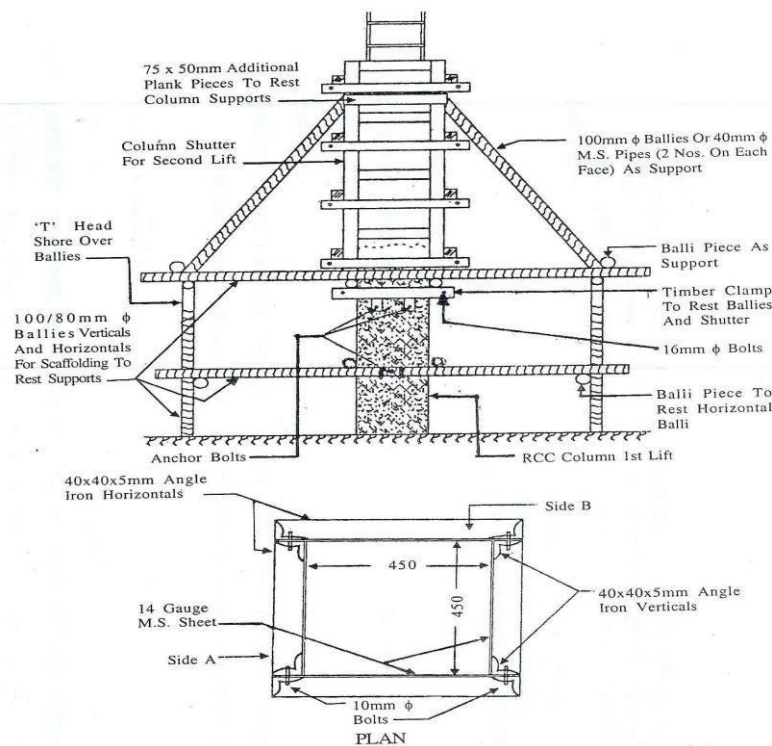
Code	Discription	Unit	Quantity	Rate	Amount
	Note: 1. The analysis of rates of form work of structures like retaining walls etc. cannot be based on a simple area basis but one has to examine the different items involved in arriving at correct analysis. To arrive at the correct quantity one must know at least the basic dimension of the structure, then only we can base our requirements. 2. For the retaining wall shown in the figure we will have to provide 1200 mm long shutters so that one can cast 1000 mm lifts except the first lift as 200 mm will go as waste (non contact area) under over-laps and according to mode of measurements, the payment would be made for shuttering work only for area of shutters in contact with the concrete surface, though much more area of form-work has to be done over lapping. Hence the cost of the additional material required to cover the extra portion has to be taken into account for analyzing the correct rate. 3. Also the M.S. shutters that are erected in position have to be supported from both sides. The height of retaining wall to be concreted is 8.0 m and it would be practically impossible to provide the supports from the two sides. Hence the only alternative is to make the shutters that are fixed self supporting. This can be done by providing 3 Nos. of 12 mm dia through bolts duly threaded on both ends per each shutter and each lift as shown in Fig. M.S. channels are then fixed over the full length of the wall shuttering on both sides with the help of holes provided in the channel to the through bolts and tightened as shown in fig. 4. The top surfaces of the wall shutters on both sides also should be supported and this can be done by providing spacers out of M.S. flats of size 40x6 mm and bolted to the shutters on both sides as shown in Fig. Thus with this arrangement one can concrete the first lift. However for doing the form work of 2nd lift we have to make some additional arrangements to fix the shutters. Because we have to provide stable scaffolding for the labour to stand and work, and also provide proper resting place for the shutters on both sides. As it is not economical to provide stable and strong scaffolding for labour to stand and work, we can take the advantage of already embedded bolts in three rows in the first lift. Accordingly to the topmost bolt a 40 x 40 x 6 mm angle iron is fixed throughout the length of the wall on both sides, over which the shutters to be fixed to the 2nd lift can be easily kept and fixed to the angle iron at bottom with bolts. Similarly M.S. brackets out of angle iron 40x40x 6mm are manufactured and fixed to the lower two bolts. In addition, the brackets are provided with railing out of 16 mm dia bars, so that the workers can safely work on the scaffolding and then fix the shutters for 2nd and subsequent lifts of the retaining wall formwork. The procure for fixing shutters for 2nd lift shall be exactly as explained for erecting the first lift.				
	Dimension of Wall: Length of wall = 7900 mm Thickness at bottom = 500mm Thickness at top = 350mm Height from base = 8000 mm Quantity of concrete involved = $1 \times 7.90 \times [0.50 + 0.35] / 2 \times 8.00 = 26.86 \text{ cum}$ Contact area: (per lift) $2 \times 7.90 \times 1.00 = 15.80 \text{ sqm}$ $2 \times [0.50 + 0.35] / 2 \times 1.00 = 0.85 \text{ sqm}$ Total = 16.65 sqm				
	As explained earlier we will need 1200mm high shutters to cover a contact area of 1000mm height. Let us consider the wall forms of size 600x1200 as this is a very common size available in market even on hire basis. For one side we will need 13 full shutters and one small shutter of size 180x1200 which can be fixed at the central portion of the wall. The end shutters have to be altered to adjust to the slope after each lift, however, the size of shutter as one number 350x1200 and one number 150x1200 can be taken for each end.				
	MATERIALS				

Code	Discription	Unit	Quantity	Rate	Amount
05041	MS sheet 14 gauge required for main forms and small forms: $2 \times 13 \times 0.60 \times 1.20 = 18.72 \text{ sqm}$ $2 \times 1 \times 0.18 \times 1.20 = 0.432 \text{ sqm}$ $2 \times 1 \times 0.35 \times 1.20 = 0.84 \text{ sqm}$ $2 \times 1 \times 0.15 \times 1.20 = 0.36 \text{ sqm}$ Total = 20.352 sqm Add for wastage = 1.148 sqm Net total = 21.5 sqm Wt. of MS sheets 21.5 sqm @ 15.70kg/sqm = 337.55kg = 3.375q	q	3.375	₹ 4,532.00	₹ 15,295.50
05056	40x40x6 mm Angle iron for backing: Vertical: $2 \times 2 \times 13 \times 1.20 = 62.40 \text{m}$ $2 \times 2 \times 1 \times 1.20 = 4.80 \text{m}$ $2 \times 2 \times 1 \times 1.20 = 4.80 \text{m}$ $2 \times 2 \times 1 \times 1.20 = 4.80 \text{m}$ Horizontals: $2 \times 4 \times 13 \times 0.60 = 62.40 \text{m}$ $2 \times 4 \times 1 \times 0.18 = 1.44 \text{m}$ $2 \times 4 \times 1 \times 0.35 = 2.80 \text{m}$ $2 \times 4 \times 1 \times 0.15 = 1.20 \text{m}$ Corner angles $2 \times 2 \times 1.20 = 4.80 \text{m}$ Total = 149.44m Add for wastage = 5.56m 155.00m @ 3.50kg/m = 542.5kg = 5.425q	q	5.425	₹ 4,267.00	₹ 23,148.48
0468	Carriage of steel	tonne	0.88	₹ 110.94	₹ 97.63
MR	Cost of manufacturing [form panels/shuttering plates to cover 20.352sqm]	q	8.426	₹ 850.00	₹ 7,162.10
					₹ 45,703.71
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 228.52
	Considering the salvage value as 25% Net cost =	75%	of	₹ 228.52	₹ 171.39
05026	40x6 mm M.S. Flats as spacers Considering spacing of spacers at 150 mm c/c $= 53 \times 0.65 = 34.45 \text{ m}$ Weight of spacers = $34.45 \times 1.90 \text{ kg/m} = 64.46 \text{ kg} = 0.65 \text{q}$.	q	0.65	₹ 3,992.00	₹ 2,594.80
05056	40x75 mm Medium weight M.S. Channel M/S. Channel $2 \times 3 \times 8.2 = 49.20 \text{m}$ $2 \times 3 \times 0.60 = 3.60 \text{ m}$. Total = 52.80 m. Weight of channels = $52.80 \times 6.80 \text{ kg/m} = 359.04 \text{ kg} = 3.59 \text{ q}$	q	3.59	₹ 4,267.00	₹ 15,318.53

Code	Discription	Unit	Quantity	Rate	Amount
05056	40x40x6 mm Angle iron for Brackets and for base Vertical: 2x14x1.00 = 28.00m Horizontals: 2x14x1.00 = 28.00m Inclineds: 2x14x1.20 = 33.60m 2x14x0.60 = 16.80m Cross straight: 2x2x8.00 = 32.00m Railing verticals: 2x14x0.75 = 21.00 For base below shutters = 2x8.00 = 16.00 Total = 175.40m @3.50kg/m = 613.90kg = 6.14q	q	6.140	₹ 4,267.00	₹ 26,199.38
05039	16 mm dia. M.S. bars for hand railing 2x2x8.00 = 32.00m = 50.56 kg = 0.50q	q	0.50	₹ 4,010.00	₹ 2,005.00
05043	10 mm dia 30 mm long bolts with nuts and washers etc. (a) For fixing spacers = 2x53 = 106 Nos. (b) For fixing railing verticals and cross angles 2x2x14 = 56 Nos. 2x2x14 = 56 Nos. Total = 112 Nos Grand total = 106+112 = 218 Nos. @ 0.092 = 20 kg.	10 Nos.	218	₹ 27.00	₹ 588.60
05043	6mm dia 30 mm long bolts with nuts and washers etc. (a) To fix sides of shutters = 2x15x8= 240 Nos. (b) To fix sides of bottoms = 2x14x4 = 112 Nos. Total = 352 Nos @ 0.039 kg/m = 13.72 kg.	10 Nos.	352	₹ 27.00	₹ 950.40
05043	12mm dia bolts with nuts and washers as tie rods per lift [average length = 0.75m] = 3x0.75 = 2.25 kg	10 Nos.	3	₹ 27.00	₹ 8.10
0468	Carriage for brackets channels etc. except bolts nuts etc.: 40x6 mm flats = 0.65 q 40x75 mm channels = 3.59q 40x40x6 mm Angle Iron = 6.14q 16 mm dia bars = 0.50q Total = 10.88q = 1.09tonnes	tonne	1.09	₹ 110.94	₹ 120.92
MR	Cost of manufacturing [MS flats, channels and brackets etc. are to be cut, holes drilled, welded etc]	q	10.880	₹ 850.00	₹ 9,248.00
					₹ 57,033.73
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 285.17
	Considering the salvage value as 25% Net cost =	75%	of	₹ 285.17	₹ 213.88
	Note: No separate provision for scaffolding is made as the brackets serve the purpose of scaffolding also.				
	LABOUR:				
0208*	Carpenter	Day	3.00	₹ 400.00	₹ 1,200.00
0212	Helper	Day	4.25	₹ 300.00	₹ 1,275.00
					₹ 2,860.27

Code	Discription	Unit	Quantity	Rate	Amount
	Add for shuttering oil etc	@	0.05%		₹ 1.43
					₹ 2,861.70
	Add for Ladders, planks etc.	@	0.50%		₹ 14.31
					₹ 2,876.01
	Add for Sundries and contingencies	@	3%		₹ 85.85
					₹ 5,837.87
	Add for contractor's profit and overheads	@	15%		₹ 875.68
	Cost of formwork for retaining wall with 16.65 sqm. contact area				₹ 6,713.55
	Cost of formwork per sqm				₹ 403.22
	Rate per sqm.	Say			₹ 403.20

4.3	Centering shuttering including struttings, propping etc. and removal of form work for:
4.3.3	Columns, piers, abutments, pillarars, posts and struts.

**Note:**

1. The column shutters (column box) should be manufactured very carefully with great precision so that erecting the shutters in position quickly, in plumb and alignment should be very easy.

The length of a column box should not be more than 2 m and has to be manufactured out of full length shutters and not joined in a piecemeal method. Two shutters of size 450 mm x 2000 mm are joined with two shutters of size 535 mm x 2000 mm to make a column box to cast a column of size 450 mm x 450 mm up to a height of 2 m. The shutters can be manufactured in any local work shop and if manufactured carefully one can get best results.

2. The simple way of manufacturing the column box is to make a frame with angle iron and clad the frame with 14 gauge M.S. sheet, by welding. Holes are drilled in the vertical angles to fix the shutters with each other by bolts. A shutter manufactured as above will be quite superior to do a quality job.

3. The weight of steel without wastage is $3.94 \times 15.7 + 25.85 \times 3 = 139.408$ Kg or 1.394 q.

4. Instead of column clamps one can use M.S Channels of small size and in that case 2 Nos. of 16 mm diameter bolts per pair of channel length will have to be used.

Code	Discription	Unit	Quantity	Rate	Amount

Code	Description	Unit	Quantity	Rate	Amount
	Size of column: 450mmx450mmx3.50m The 3.50 m long column will have to be cast in two lifts, as one should not have a column box of length more than 2.00m otherwise the segregation of concrete cannot be avoided. Hence contact area for first lift: $4 \times 0.45 \times 2.00 = 3.60 \text{ sqm}$ For Second lift: $4 \times 0.45 \times 1.50 = 2.70 \text{ sqm}$ Average contact area = $\{3.60+2.70\}/2 = 3.15 \text{ sqm}$				
	MATERIALS				
05041	MS sheet 14 gauge: $2 \times 0.535 \times 2.00 = 2.14 \text{ sqm}$ $2 \times 0.45 \times 2.00 = 1.80 \text{ sqm}$ Total = 3.94 sqm Add for wastage = 0.21 sqm Net total = 4.15 sqm Wt. of MS sheets 4.15 sqm @ 15.70kg/sqm = 0.6515q	q	0.6515	₹ 4,532.00	₹ 2,952.60
05056	40x40x5 mm Angle iron for frame: Vertical: $4 \times 2 \times 2.00 = 16.00 \text{m}$ Horizontals: $2 \times 5 \times 0.45 = 4.50 \text{m}$ $2 \times 5 \times 0.535 = 5.35 \text{m}$ Total = 25.85m Add for wastage = 1.15m $27.00 \text{m} @ 3.00 \text{kg/m} = 81 \text{kg} = 0.81 \text{q}$	q	0.810	₹ 4,267.00	₹ 3,456.27
0468	Carriage of steel	tonne	0.146	₹ 110.94	₹ 16.20
MR	Cost of fabrication [form panels including cutting, welding etc. in a local work shop]	q	1.394	₹ 850.00	₹ 1,184.90
					₹ 7,609.97
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 38.05
	Considering the salvage value as 25% Net cost =	75%	of	₹ 38.05	₹ 28.54
04020	Column clamps [450-1070mm] = 5 sets	each	5	₹ 1,628.00	₹ 8,140.00
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 40.70
	Considering the salvage value as 25% Net cost =	75%	of	₹ 40.70	₹ 30.53
05043	10 mm dia - 30 mm long bolts with nuts and washers $4 \times 13 = 52 \text{ Nos.}$	10 Nos.	52	₹ 27.00	₹ 140.40
	Considering that these items can be used 20 times. Thus cost of using once=				₹ 7.02
	Considering the salvage value as 25% Net cost =	75%	of	₹ 7.02	₹ 5.27
05053	16 mm dia bolts for brackets = 2 Nos.	each	2	₹ 79.00	₹ 15.80
	Considering that these items can be used 40 times. Thus cost of using once=				₹ 0.40
	Considering the salvage value as 25% Net cost =	75%	of	₹ 0.40	₹ 0.30

Code	Discription	Unit	Quantity	Rate	Amount
04010	(i) 100mm Ø safeda ballies End verticles for staging 4x1.80=7.20m. Lower cross ballies 4x0.80 = 3.20m Top cross ballies 4x0.80 = 3.20m Horizontals 8x9.0 = 72m End inclined ballies 4x2x2.0 = 16.00m Total = 101.60m	m	101.60	₹ 59.00	₹ 5,994.40
04013	(ii) Timber scantlings for tee head shore and brackets (a) For tee head shore: 4x0.75x0.075x0.075 = 0.017 cum (b) Inclined members 4x2x0.50x0.075x0.05 = 0.015cum (c) Brackets to rest the shutters 2x0.75x0.075x0.05 = 0.006 Total = 0.038 cum = 38 cudm	10 cudm	38.00	₹ 137.00	₹ 520.60
05053	(iii) 12 mm dia - 750 mm long anchor bolts = 3nos.	Each	3	₹ 79.00	₹ 237.00
04010	(iv) 100mm Ø safeda ballies for scaffolding Verticals 4x3.00 = 12.00m Horizontals 2x8x2.00= 32m Total = 44.00m	m	44.00	₹ 59.00	₹ 2,596.00
0473	Carriage planks and ballies	cum	0.545	₹ 80.65	₹ 43.95
					₹ 9,391.95
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 187.84
	Considering the salvage value as 25% Net cost =	75%	of	₹ 187.84	₹ 140.88
	LABOUR:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.35	₹ 400.00	₹ 140.00
0212	Helper	Day	0.90	₹ 300.00	₹ 270.00
					₹ 658.02
	Add for nails, coir ropes, chalis etc	@	1.00%		₹ 6.58
					₹ 664.60
	Add for shuttering oil etc.	@	1.00%		₹ 6.65
					₹ 671.25
	Add for Sundries and contingencies	@	3%		₹ 19.94
					₹ 1,362.44
	Add for contractor's profit and overheads	@	15%		₹ 204.37
	Cost of formwork for column of 3.15 sqm.				₹ 1,566.81
	Cost of formwork per sqm				₹ 497.40
	Rate per sqm.	Say			₹ 497.40

CEMENT CONCRETE [PRE-CAST]

Code	Description	Unit	Quantity	Rate	Amount

General guidelines on pre-casting jobs:

1. Though the item requires finishing to be done, no separate plaster should be done on pre-cast items. If these items are cast in a perfect form with correct mix one need not do any extra finishing and if finishing is done on these small items the same will peel off later, hence no finishing is considered in the analysis.
2. As these are small works the labour component for casting on ground, finishing and curing has to be accounted for and cannot be clubbed with rates of concreting for mass work. Similarly, fixing the moulds in position is a slow process and thus the actual labour involved is to be considered.
3. The pre-casting work consists of three main operations:
 - a) Casting concrete in moulds: This is a slow process and labour component should balance the turnover.
 - b) Curing and stacking: This is the most important matter and provision of separate curing tank and stacking yard to stack finished materials very carefully for 28 days is obligatory.
 - c) Fixing the precast items in position: This is also a slow process and has to be done carefully. Hence, separate labour component for fixing must be considered.

4.4.1	Providing and laying at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1 : 3 (1 cement : 3 fine sand) including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surface complete.				
4.4.1.1	1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20mm nominal size).				
	No. of kerbs = 37 Nos. Size of kerbs 450x300x200 mm Qty: 37x0.45x0.30x0.20 = 0.999 say 1.00 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
03001	Cement for fixing and finishing	tonne	0.042	₹ 6,100.00	₹ 256.20
02003	Sand for fixing and finishing	cum	0.0882	₹ 370.00	₹ 32.63
	CARRIAGE				
0405	Stone aggregate	cum	0.9400	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.5582	₹ 142.63	₹ 79.62
0421	Cement	tonne	0.3620	₹ 110.94	₹ 40.16
	LABOUR [for Pre-casting on ground and finishing]:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.200	₹ 400.00	₹ 80.00
0203	Beldar (M)	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie (F)	Day	1.00	₹ 300.00	₹ 300.00
0205	Bhishti/Waterman	Day	0.150	₹ 300.00	₹ 45.00
	LABOUR [for fixing]:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.500	₹ 400.00	₹ 200.00
0203	Beldar (M)	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie (F)	Day	1.00	₹ 300.00	₹ 300.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
					₹ 8,019.26
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2.0%		₹ 160.39

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 8,179.65
	Add for construction of casting platform, curing tank, building paper, cost of moulds and mould oil etc.	@	5%		₹ 408.98
					₹ 8,588.63
	Add for Sundries and contingencies	@	3%		₹ 257.66
					₹ 8,846.29
	Add for water charges	@	1%		₹ 88.46
					₹ 8,934.75
	Add for contractor's profit and overheads	@	15%		₹ 1,340.21
	Cost of pre-casting kerbs of 1 cum. Quantity				₹ 10,274.96
	Rate per cum.	Say			₹ 10,275.00
4.4.2	Providing and fixing upto floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1 : 3 (1 cement : 3 fine sand) including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surface complete.				
4.4.2.1	1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20mm nominal size).				
Code	Discription	Unit	Quantity	Rate	Amount
	No. of Shelves =100 Nos. Size of coping slab 500x200x100 mm Qty: 100x0.50x0.20x0.10 = 1.00 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
03001	Cement for fixing and finishing	tonne	0.060	₹ 6,100.00	₹ 366.00
02003	Sand for fixing and finishing	cum	0.1267	₹ 370.00	₹ 46.88
	CARRIAGE				
0405	Stone aggregate	cum	0.9400	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.5967	₹ 142.63	₹ 85.11
0421	Cement	tonne	0.3800	₹ 110.94	₹ 42.16
0.00	LABOUR [for Pre-casting on ground and finishing]:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.400	₹ 400.00	₹ 160.00
0203	Beldar (M)	Day	1.20	₹ 300.00	₹ 360.00
0212	Coolie (F)	Day	1.20	₹ 300.00	₹ 360.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
	LABOUR [for fixing]:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.600	₹ 400.00	₹ 240.00
0203	Beldar (M)	Day	1.50	₹ 300.00	₹ 450.00
0212	Coolie (F)	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhishti/Waterman	Day	0.040	₹ 300.00	₹ 12.00

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 8,670.55
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	5.0%		₹ 433.53
					₹ 9,104.08
	Add for construction of casting platform, curing tank, building paper, cost of moulds and mould oil etc.	@	5%		₹ 455.20
					₹ 9,559.28
	Add for Sundries and contingencies	@	3%		₹ 286.78
					₹ 9,846.06
	Add for water charges	@	1%		₹ 98.46
					₹ 9,944.52
	Add for contractor's profit and overheads	@	15%		₹ 1,491.68
	Cost of pre-cast concrete for copings of 1 cum. Quantity				₹ 11,436.20
	Rate per cum.	Say			₹ 11,436.20

4.4.2	Providing and fixing upto floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1 : 3 (1 cement : 3 fine sand) including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surface complete.				
4.4.2.2	1:3:6 (1 cement: 3 fine sand : 4 graded stone aggregate 20mm nominal size).				
Code	Discription	Unit	Quantity	Rate	Amount
	No. of Shelves =100 Nos. Size of coping slab 500x200x100 mm Qty: 100x0.50x0.20x0.10 = 1.00 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.727	₹ 3,969.00	₹ 2,885.46
04007	Stone aggregate 12mm	cum	0.242	₹ 4,005.00	₹ 969.21
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
03001	Cement for fixing and finishing	tonne	0.060	₹ 6,100.00	₹ 366.00
02003	Sand for fixing and finishing	cum	0.1267	₹ 370.00	₹ 46.88
	CARRIAGE				
0405	Stone aggregate	cum	0.9690	₹ 159.75	₹ 154.80
0425	Fine sand	cum	0.6117	₹ 142.63	₹ 87.25
0421	Cement	tonne	0.2800	₹ 110.94	₹ 31.06
	LABOUR [for Pre-casting on ground and finishing]:				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.400	₹ 400.00	₹ 160.00
0203	Beldar (M)	Day	1.20	₹ 300.00	₹ 360.00
0212	Coolie (F)	Day	1.20	₹ 300.00	₹ 360.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
	LABOUR [for fixing]:				

Code	Discription	Unit	Quantity	Rate	Amount
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0218*	Mason	Day	0.600	₹ 400.00	₹ 240.00
0203	Beldar (M)	Day	1.50	₹ 300.00	₹ 450.00
0212	Coolie (F)	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhishti/Waterman	Day	0.040	₹ 300.00	₹ 12.00
					₹ 8,177.11
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	5.0%		₹ 408.86
					₹ 8,585.97
	Add for construction of casting platform, curing tank, building paper, cost of moulds and mould oil etc.	@	5%		₹ 429.30
					₹ 9,015.27
	Add for Sundries and contingencies	@	3%		₹ 270.46
					₹ 9,285.73
	Add for water charges	@	1%		₹ 92.86
					₹ 9,378.59
	Add for contractor's profit and overheads	@	15%		₹ 1,406.79
	Cost of pre-cast concrete for copings of 1 cum. Quantity				₹ 10,785.38
	Rate per cum.	Say			₹ 10,785.40

4.4.3	Providing and fixing upto floor five level precast cement concrete solid block including hoisting and setting in position with cement mortar 1 : 3 (1 cement : 3 fine sand) including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surface complete.				
4.4.3.1	1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20mm nominal size).				
Code	Discription	Unit	Quantity	Rate	Amount
	No. of solid blocks =667 Nos. Size of solid block 200x100x75 mm Qty: 667x0.20x0.10x0.075 = 1.00 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
03001	Cement for fixing and finishing	tonne	0.093	₹ 6,100.00	₹ 567.30
02003	Sand for fixing and finishing	cum	0.1953	₹ 370.00	₹ 72.26
	CARRIAGE				
0405	Stone aggregate	cum	0.9400	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.6653	₹ 142.63	₹ 94.89
0421	Cement	tonne	0.4130	₹ 110.94	₹ 45.82
0.00	LABOUR [for Pre-casting]:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.250	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie (F)	Day	1.00	₹ 300.00	₹ 300.00

Code	Discription	Unit	Quantity	Rate	Amount
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
	LABOUR [for scaffolding, hoisting, fixing and finishing blocks]:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.500	₹ 400.00	₹ 200.00
0203	Beldar (M)	Day	1.25	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.25	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
					₹ 8,583.17
	Add for 6 mm thick cement plaster 1 : 3	@	5.0%		₹ 429.16
					₹ 9,012.33
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	5.0%		₹ 450.62
					₹ 9,462.95
	Add for construction of casting platform, curing tank, building paper, cost of moulds and mould oil etc.	@	3%		₹ 283.89
					₹ 9,746.84
	Add for Hoisting arrangements including scaffolding, pullies, ropes etc.	@	4%		₹ 389.87
					₹ 10,136.71
	Add for Sundries and contingencies	@	3%		₹ 304.10
					₹ 10,440.81
	Add for water charges	@	1%		₹ 104.41
					₹ 10,545.22
	Add for contractor's profit and overheads	@	15%		₹ 1,581.78
	Cost of 1 cum. Pre-cast solid blocks				₹ 12,127.00
	Rate per cum.	Say			₹ 12,127.00

4.4.3	Providing and fixing upto floor five level precast cement concrete solid block including hoisting and setting in position with cement mortar 1 : 3 (1 cement : 3 fine sand) including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surface complete.				
4.4.3.2	1:3:6 (1 cement: 3 fine sand : 4 graded stone aggregate 20mm nominal size).				
Code	Discription	Unit	Quantity	Rate	Amount
	No. of Shelves =100 Nos. Size of coping slab 500x200x100 mm Qty: 100x0.50x0.20x0.10 = 1.00 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.727	₹ 3,969.00	₹ 2,885.46
04007	Stone aggregate 12mm	cum	0.242	₹ 4,005.00	₹ 969.21
02003	Fine sand	cum	0.485	₹ 370.00	₹ 179.45
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
03001	Cement for fixing and finishing	tonne	0.093	₹ 6,100.00	₹ 567.30
02003	Sand for fixing and finishing	cum	0.1964	₹ 370.00	₹ 72.67
	CARRIAGE				
0405	Stone aggregate	cum	0.9690	₹ 159.75	₹ 154.80
0425	Fine sand	cum	0.6814	₹ 142.63	₹ 97.19

Code	Discription	Unit	Quantity	Rate	Amount
0421	Cement	tonne	0.3130	₹ 110.94	₹ 34.72
	LABOUR [for Pre-casting]:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.250	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie (F)	Day	1.00	₹ 300.00	₹ 300.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
	LABOUR [for scaffolding, hoisting, fixing and finishing blocks]:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.500	₹ 400.00	₹ 200.00
0203	Beldar (M)	Day	1.25	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.25	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
					₹ 8,090.30
	Add for 6 mm thick cement plaster 1 : 3	@	5.0%		₹ 404.52
					₹ 8,494.82
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	5.0%		₹ 424.74
					₹ 8,919.56
	Add for construction of casting platform, curing tank, building paper, cost of moulds and mould oil etc.	@	3%		₹ 267.59
					₹ 9,187.15
	Add for Hoisting arrangements including scaffolding, pullies, ropes etc.	@	4%		₹ 367.49
					₹ 9,554.64
	Add for Sundries and contingencies	@	3%		₹ 286.64
					₹ 9,841.28
	Add for water charges	@	1%		₹ 98.41
					₹ 9,939.69
	Add for contractor's profit and overheads	@	15%		₹ 1,490.95
	Cost of 1 cum. Pre-cast solid blocks				₹ 11,430.64
	Rate per cum.	Say			₹ 11,430.60

4.4.4	Providing and fixing upto floor five level precast cement concrete hollow block including hoisting and setting in position with cement mortar 1 : 3 (1 cement : 3 fine sand) including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surface complete.				
4.4.4.1	1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20mm nominal size).				
Code	Discription	Unit	Quantity	Rate	Amount

Code	Discription	Unit	Quantity	Rate	Amount
	No. of Hollow blocks =34 Nos. Overall Size of block 500x200x300 mm Size of hollow provided 100x100x300 mm No. of hollows = 3 nos. per block Qty. of Concrete in 34 blocks excluding hollow portion = $34 \times 0.50 \times 0.20 \times 0.30 = 1.02$ cum say 1.00 cum. Vol. occupied by hollows = $34 \times 3 \times 0.1 \times 0.1 \times 0.3 = 0.306$ cum % of hollows = 30%				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.49	₹ 3,969.00	₹ 1,944.81
04007	Stone aggregate 12mm	cum	0.163	₹ 4,005.00	₹ 652.82
02003	Fine sand	cum	0.3265	₹ 370.00	₹ 120.81
03001	Cement	tonne	0.222	₹ 6,100.00	₹ 1,354.20
03001	Cement for fixing and finishing	tonne	0.0446	₹ 6,100.00	₹ 272.06
02003	Sand for fixing and finishing	cum	0.0937	₹ 370.00	₹ 34.65
	CARRIAGE				
0405	Stone aggregate	cum	0.6530	₹ 159.75	₹ 104.32
0425	Fine sand	cum	0.4202	₹ 142.63	₹ 59.93
0421	Cement	tonne	0.2666	₹ 110.94	₹ 29.58
	LABOUR [for Pre-casting]:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.250	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	0.55	₹ 300.00	₹ 165.00
0212	Coolie (F)	Day	0.55	₹ 300.00	₹ 165.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
	LABOUR [for scaffolding, hoisting, fixing and finishing blocks]:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.500	₹ 400.00	₹ 200.00
0203	Beldar (M)	Day	1.25	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.25	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
					₹ 6,025.68
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	10.0%		₹ 602.57
					₹ 6,628.25
	Add for construction of casting platform, curing tank, building paper, cost of moulds and mould oil etc.	@	7%		₹ 463.98
					₹ 7,092.23
	Add for Hoisting arrangements including scaffolding, pullies, ropes etc.	@	3%		₹ 212.77
					₹ 7,305.00
	Add for Sundries and contingencies	@	3%		₹ 219.15
					₹ 7,524.15
	Add for water charges	@	1%		₹ 75.24

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 7,599.39
	Add for contractor's profit and overheads	@	15%		₹ 1,139.91
	Cost of 1 cum. Pre-cast hollow blocks				₹ 8,739.30
	Rate per cum.	Say			₹ 8,739.30

4.4.4	Providing and fixing upto floor five level precast cement concrete hollow block including hoisting and setting in position with cement mortar 1 : 3 (1 cement : 3 fine sand) including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surface complete.				
4.4.4.2	1:3:6 (1 cement: 3 fine sand : 4 graded stone aggregate 20mm nominal size).				
	No. of Hollow blocks =34 Nos. Overall Size of block 500x200x300 mm Size of hollow provided 100x100x300 mm No. of hollows = 3 nos. per block Qty. of Concrete in 34 blocks excluding hollow portion = 34x0.50x0.20x0.30 = 1.02 cum say 1.00 cum. Vol. occupied by hollows = 34x3x0.1x0.1x0.3 = 0.306 cum % of hollows = 30%				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.509	₹ 3,969.00	₹ 2,020.22
04007	Stone aggregate 12mm	cum	0.169	₹ 4,005.00	₹ 676.85
02003	Fine sand	cum	0.34	₹ 370.00	₹ 125.80
03001	Cement	tonne	0.15	₹ 6,100.00	₹ 939.40
03001	Cement for fixing and finishing	tonne	0.0446	₹ 6,100.00	₹ 272.06
02003	Sand for fixing and finishing	cum	0.0937	₹ 370.00	₹ 34.65
	CARRIAGE				
0405	Stone aggregate	cum	0.6780	₹ 159.75	₹ 108.31
0425	Fine sand	cum	0.4337	₹ 142.63	₹ 61.85
0421	Cement	tonne	0.1986	₹ 110.94	₹ 22.03
	LABOUR [for Pre-casting]:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.250	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	0.55	₹ 300.00	₹ 165.00
0212	Coolie (F)	Day	0.55	₹ 300.00	₹ 165.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
	LABOUR [for scaffolding, hoisting, fixing and finishing blocks]:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.500	₹ 400.00	₹ 200.00
0203	Beldar (M)	Day	1.25	₹ 300.00	₹ 375.00
0212	Coolie (F)	Day	1.25	₹ 300.00	₹ 375.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
					₹ 5,713.67
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	10.0%		₹ 571.37
					₹ 6,285.04

Code	Discription	Unit	Quantity	Rate	Amount
	Add for construction of casting platform, curing tank, building paper, cost of moulds and mould oil etc.	@	7%		₹ 439.95
					₹ 6,724.99
	Add for Hoisting arrangements including scaffolding, pullies, ropes etc.	@	3%		₹ 201.75
					₹ 6,926.74
	Add for Sundries and contingencies	@	3%		₹ 207.80
					₹ 7,134.54
	Add for water charges	@	1%		₹ 71.35
					₹ 7,205.89
	Add for contractor's profit and overheads	@	15%		₹ 1,080.88
	Cost of 1 cum. Pre-cast solid blocks				₹ 8,286.77
	Rate per cum.	Say			₹ 8,286.80

4.4.5	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450 mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150mm in cement concrete 1:3:6 (1cement:3fine sand:6graded stone aggregate 20 mm nomonal size) including necessary excavation of size 250x250x450 mm deep for the same in bitumen/concrete pavement at specified spacing.				
	125 50 300 300 50mm dia Sleeve In Precast Cement Concrete Bollard With M.S. Pipe Upto A Depth Of 300 mm Precast Bollard With Cement Concrete 1:2:4 – 600 mm Long 40mm dia M.S. Pipe Embedded Both In Bollard Concrete As Well As Base Concrete 6mm Thick Anchor Plate For Fixing 40mm dia M.S. Pipe Base With Cast-in-Situ Cement Concrete 1:3:6 For Fixing Bollard In Position 150 6mm 40 150 450 250				
Code	Discription	Unit	Quantity	Rate	Amount

Code	Discription	Unit	Quantity	Rate	Amount
	No. of bollards 150 Nos. overall size of bollard = 125mm dia 600mm depth Mode of concrete: Precast Net quantity of precast concrete of one bollard = $\pi \times 0.125^2 / 4 \times 0.60 = 0.00736$ - [($\pi \times 0.052^2 / 4 \times 0.30 = 0.000589$)+ ($\pi \times 0.042^2 / 4 \times 0.30 = 0.000377$)] = 0.006394 Total quantity of 150 bollards = $150 \times 0.006394 = 0.9591$ cum say 1.00cum. Materials Note: This is a very small member in addition the pipes are embedded with the result the width available for concreting is just 35 to 40 mm or less, where using of 20mm size stone aggregate will not be feasible. Hence for this particular item only 12 mm graded stone aggretgate is propose, instead of 20 mm stone aggregate.				
	MATERIALS				
	Cement concrete 1:2:4 proportion				
04007	Stone aggregate 12mm	cum	0.94	₹ 4,005.00	₹ 3,764.70
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9400	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.4700	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.3200	₹ 110.94	₹ 35.50
	Steel items				
04019	50 mm dia MS pipes $150 \times 0.30 = 45\text{m}$	m	45	₹ 379.00	₹ 17,055.00
04018	40 mm dia MS pipes $150 \times 0.45 = 67.5\text{m}$	m	67.5	₹ 328.00	₹ 22,140.00
05041	6mm thick MS plate $150 \times 0.15 \times 0.15 = 3.375\text{sqm} = 1.59\text{q}$	q	1.59	₹ 4,532.00	₹ 7,205.88
	CARRIAGE				
0468	Steel items 50 mm dia MS pipes = $45\text{m} @ 5.10 = 0.23\text{t}$ 40mm dia MS pipe = $67.5\text{m} @ 3.61 = 0.24\text{t}$ 6mm thick MS plate = $3.375\text{sqm} @ 47.10 = 0.16\text{t}$	tonne	0.6300	₹ 110.94	₹ 69.89
MR	Cutting MS pipes, MS plate to size and welding pipe to plate for 150 bollards	Nos.	150	₹ 45.00	₹ 6,750.00
	LABOUR [for casting and fixing]:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.600	₹ 400.00	₹ 240.00
0203	Beldar (M)	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie (F)	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
					₹ 60,165.33
	Add cost of hire and running charges of mixer, moulds for casting, water pump etc.	@	4.0%		₹ 2,406.61
					₹ 62,571.94
	Add for construction of casting platform, curing tank, mould oil etc.	@	2%		₹ 1,251.44
					₹ 63,823.38
	Add for Sundries and contingencies	@	3%		₹ 1,914.70

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 65,738.08
	Add for water charges	@	1%		₹ 657.38
					₹ 66,395.46
	Add for contractor's profit and overheads	@	15%		₹ 9,959.32
	Cost of precasting 150 nos. bollords of 1 cum quantity				₹ 76,354.78
	Ancillary items for fixing 150 nos. bollards				
	Excavation in ordinary rock 150x0.25x0.25x0.15 = 1.41cum	cum	1.41	₹ 113.40	₹ 159.89
	Excavation in all kind of soil 150x0.25x0.25x0.30 = 2.81cum	cum	2.81	₹ 103.40	₹ 290.55
	Cement Concrete (cast in situ) 1:3:6 proportion 150x0.25x0.25x0.45 = 4.22 cum	cum	4.22	₹ 7,567.60	₹ 31,935.27
	Net Cost of precasting and fixing in position 150 nos. bollords of 1 cum quantity				₹ 108,740.49
	Cost of precasting and fixing one bollard				₹ 724.94
		Say			₹ 724.90

DAMP PROOF COURSE AND MISCELLANEOUS ITEMS

4.5.1	Providing and laying damp-proof course with cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 12.5mm/20mm nominal size).				
4.5.1.1	D.P.C. 40 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 12 sqm area: Size of damp proof course 1x60.0x0.2 = 12.00 sqm				
	MATERIALS				
04007	Stone aggregate 12.5mm	cum	0.451	₹ 4,005.00	₹ 1,806.26
02003	Fine sand	cum	0.225	₹ 370.00	₹ 83.25
03001	Cement	tonne	0.1535	₹ 6,100.00	₹ 936.35
	CARRIAGE				
0405	Stone aggregate	cum	0.451	₹ 159.75	₹ 72.05
0425	Fine sand	cum	0.225	₹ 142.63	₹ 32.09
0421	Cement	tonne	0.1535	₹ 110.94	₹ 17.03
	LABOUR:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.60	₹ 400.00	₹ 240.00
0203	Beldar (M)	Day	0.55	₹ 300.00	₹ 165.00
0212	Coolie (F)	Day	0.55	₹ 300.00	₹ 165.00
0205	Bhishti/Waterman	Day	0.05	₹ 300.00	₹ 15.00
					₹ 3,574.53
	Add cost of hire and running charges of mixer, water pump etc.	@	1.70%		₹ 60.77
					₹ 3,635.30
	Add for Sundries and contingencies	@	3%		₹ 109.06

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 3,744.36
	Add for water charges	@	1%		₹ 37.44
					₹ 3,781.80
	Add for contractor's profit and overheads	@	15%		₹ 567.27
	Cost of 40 mm thick damp proof coarse for 12 sqm area				₹ 4,349.07
	Rate per sqm.				₹ 362.42
		Say			₹ 362.40

4.5.1	Providing and laying damp-proof course with cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm/12.5mm nominal size).				
4.5.1.2	D.P.C. 50 mm thick				
	Details of cost for 12 sqm area: Size of damp proof course 1x60.0x0.2 = 12.00 sqm				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.423	₹ 3,969.00	₹ 1,678.89
04007	Stone aggregate 12.5mm	cum	0.141	₹ 4,005.00	₹ 564.71
02003	Fine sand	cum	0.282	₹ 370.00	₹ 104.34
03001	Cement	tonne	0.192	₹ 6,100.00	₹ 1,171.20
	CARRIAGE				
0405	Stone aggregate	cum	0.564	₹ 159.75	₹ 90.10
0425	Fine sand	cum	0.282	₹ 142.63	₹ 40.22
0421	Cement	tonne	0.192	₹ 110.94	₹ 21.30
	LABOUR:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0218*	Mason	Day	1.00	₹ 400.00	₹ 400.00
0203	Beldar (M)	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (F)	Day	0.65	₹ 300.00	₹ 195.00
0205	Bhishti/Waterman	Day	0.13	₹ 300.00	₹ 37.50
					₹ 4,540.76
	Add cost of hire and running charges of mixer, water pump etc.	@	1.70%		₹ 77.19
					₹ 4,617.95
	Add for Sundries and contingencies	@	3%		₹ 138.54
					₹ 4,756.49
	Add for water charges	@	1%		₹ 47.56
					₹ 4,804.05
	Add for contractor's profit and overheads	@	15%		₹ 720.61
	Cost of 50 mm thick damp proof coarse for 12 sqm area				₹ 5,524.66
	Rate per sqm.				₹ 460.39
		Say			₹ 460.40

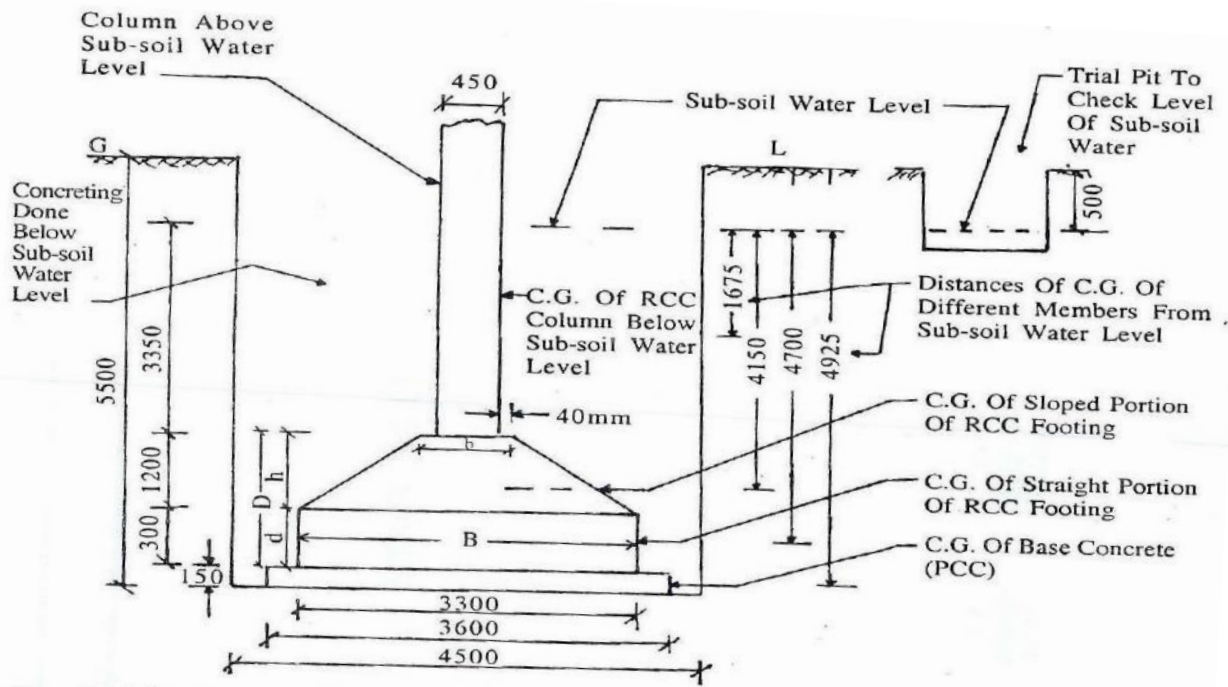
4.5.2	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50 kg of cement.				

Code	Discription	Unit	Quantity	Rate	Amount
	i) This item should not be considered for payment in case the water proofing materials in the form of liquid is used. ii)For carriage of water proofing material in the form of powder the carriage being paid for cement can be considered. iii)For doing the water proofing work perfectly the required number of cement bags for particular item should be opened and the water proofing compound mixed and the whole quantity of cement in the bag should be perfectly blended with water proofing compound only in such cases this item should be allowed. iv)Normally the contractors mix the compound directly in the mixer and this method is totally defective and will not serve any purpose.				
	MATERIALS				
04015	Water proofing materials of approved brand	kg	1.00	₹ 36.00	₹ 36.00
	CARRIAGE				
0421	Water proofing materials	tonne	0.001	₹ 110.94	₹ 0.11
	LABOUR:				
	For removing cement from bag mixing materials and refilling the bag				
0203	Beldar (M)	Day	0.10	₹ 300.00	₹ 30.00
					₹ 66.11
	Add for Sundries and contingencies	@	3%		₹ 1.98
					₹ 68.09
	Add for water charges	@	1%		₹ 0.68
					₹ 68.77
	Add for contractor's profit and overheads	@	15%		₹ 10.32
	Cost of mixing 1 kg water proofing powder in 50 kg cement				₹ 79.09
	Rate per kg	Say			₹ 79.10

4.5.3	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 12 sqm area: Size of damp proof course 1x60.0x0.2 = 12.00 sqm				
	MATERIALS				
04011	Residual bitumen or asphalt or equivalent	t	0.0204	₹ 36,820.00	₹ 751.13
02004	Kerosene oil	litre	1.5	₹ 48.00	₹ 72.00
04012	Fuel (steam coal) for heating	q	0.042	₹ 890.00	₹ 37.38
	CARRIAGE				
0472	Bitumen fuel, kerosene etc.	t	0.0246	₹ 110.94	₹ 2.73
	LABOUR:				
0218*	Mason	Day	0.20	₹ 400.00	₹ 80.00
0203	Beldar (M)	Day	0.25	₹ 300.00	₹ 75.00
					₹ 1,018.24

Code	Discription	Unit	Quantity	Rate	Amount
	Add for Brushes for cleaning and applying bitumen, cloth etc.	@	1.50%		₹ 15.27
					₹ 1,033.51
	Add for Sundries and contingencies	@	3%		₹ 31.01
					₹ 1,064.52
	Add for contractor's profit and overheads	@	15%		₹ 159.68
	Cost of applying bitumen for 12 sqm area				₹ 1,224.20
	Rate per sqm.				₹ 102.02
		Say			₹ 102.00

4.5.4	Extra for concrete work in superstructure above floor V level for each four floors or part thereof.				
	Additional Rate per cum Percentage above the rates of the respective items upto floor five level				₹ 0.08

4.5.5	Extra for laying concrete in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.				
Code	Discription	Unit	Quantity	Rate	Amount
	 (i) Height of C.G. of RCC Column Below Sub -soil Water Level = 1.675 mm (ii) Height of C.G. of Sloped Portion Of RCC Footing Below Sub-soil Water = 4.150 mm (iii) Height of C.G. of Straight Portion Of RCC Footing Below Sub-soil Water Level = 4.700 mm (iv) Height of C.G. of Base Concrete (PCC) Below Sub-soil Water Level = 4.925 mm				
	The quantity will be calculated by multiplying the depth measured from the sub-soil water level with quantity of concrete in cum executed under sub-soil water. The depth of centre of gravity shall be recorded correct to 0.1 m. (Unit of measurement = cum)				

Code	Discription	Unit	Quantity	Rate	Amount
	Quantities of concreting done for different members below sub-soil water level i) RCC column = $1 \times 0.45 \times 0.45 \times 3.35 = 0.68$ cum (ii) Sloped portion of RCC footing = $1.20/3\{(3.3 \times 3.3) + (0.53 \times 0.53) + \sqrt{(10.89 \times 0.2809)}\}$ = 5.17 cum say 5.20 cum (iii) Bottom straight portion of footing = $1 \times 3.3 \times 3.3 \times 0.3 = 3.267$ cum				
	However, these are all reinforced cement concrete items which will be dealt only in the similar item under SH. RCC. Therefore in this particular chapter we are concerned only with plain cement concrete (PCC) and in this only item under PCC is laying of cement concrete for the base of footing. Hence let us calculate the cost of laying the bottom concrete for the base and the cost of laying the remaining items will be calculated in the similar item under SH. RCC section 5.00				
	Operational input for calculating extra rate for pumping water for laying cement concrete 1:3:6 under water/liquid mud for 1.944 cum per 5.00 m depth				
	Consider the column pit shown in Fig to be dewatered to lay the base Concrete : Qty. of base concrete = $1 \times 3.6 \times 3.6 \times 0.15 = 1.944$ cum Qty. of dewatering or pumping out liquid mud with pumps of pumping capacity 3.50 kilo litres per hour or 3500 litres per hour = $4.5 \times 4.5 \times 5.00 = 101.25$ cum or say 101 cum i.e. 101×1000 litres /cum = 101000 litres Period required for pumps 101000 litres of water = $101000/3500 = 28.86$ hours. Add extra hours for keeping pump in operation for concreting and till initial set = 4 hours (approx.) Hence, Total pumping time = $28.86 + 4 = 32.86/8 = 4.11$ shift say 4 shift.				
0117	Total pumping period	shift	4	₹ 850.00	₹ 3,400.00
	LABOUR:				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar (M)	Day	6.00	₹ 300.00	₹ 1,800.00
					₹ 5,625.00
	Add for carriage of pumps, cost of buckets, ropes etc.	@	2.00%		₹ 112.50
					₹ 5,737.50
	Add for Sundries and contingencies	@	3%		₹ 172.13
					₹ 5,909.63
	Add for water charges	@	1%		₹ 59.10

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 5,968.73
	Add for contractor's profit and overheads	@	15%		₹ 895.31
	Extra cost of pumping water for laying 1.944 cum cement concrete at 5.00 m depth				₹ 6,864.04
	Extra rate per cum/meter depth				₹ 706.18
		Say			₹ 706.20

4.5.6	Extra for laying concrete in or under foul positions.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	EXTRA LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0218*	Mason	Day	0.30	₹ 400.00	₹ 120.00
0203	Beldar (M)	Day	0.25	₹ 300.00	₹ 75.00
0212	Coolie (F)	Day	0.25	₹ 300.00	₹ 75.00
					₹ 333.75
	Add for Sundries and contingencies	@	3%		₹ 10.01
					₹ 343.76
	Add for contractor's profit and overheads	@	15%		₹ 51.56
	Cost of laying 1 cum of concrete in foul position				₹ 395.32
	Rate per cum	Say			₹ 395.30

4.5.7	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 fine sand : 6 graded well burnt brick aggregate 20 mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.				
Code	Discription	Unit	Quantity	Rate	Amount
	Area of plinth protection 25.00x0.80 = 20.00 sqm				
	(i) 75 mm thick bed of dry brick ballast				
	MATERIALS				
04001	40 mm size brick ballast	cum	1.5	₹ 2,550.00	₹ 3,825.00
02003	Fine sand	cum	0.1	₹ 370.00	₹ 37.00
	CARRIAGE				
0404	40 mm size brick ballast	cum	1.5	₹ 172.74	₹ 259.11
0425	Fine sand	cum	0.1	₹ 142.63	₹ 14.26
	LABOUR:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar (M)	Day	0.10	₹ 300.00	₹ 30.00
0212	Coolie (F)	Day	0.11	₹ 300.00	₹ 33.00
					₹ 4,240.87
	(ii) Cement concrete 1:3:6 with 20 mm brick aggregate 1x25.0x0.80x0.05 = 1.00 cum	cum	1.00	₹ 6,415.70	₹ 6,415.70
					₹ 10,656.57
	Add for Sundries and contingencies [except (ii)]	@	3%		₹ 127.23
					₹ 10,783.80
	Add for water charges [except (ii)]	@	1%		₹ 43.68
					₹ 10,827.48

Code	Discription	Unit	Quantity	Rate	Amount
	Add for contractor's profit and overheads [except (ii)]	@	15%		₹ 661.77
	Cost of plinth protection for an area of 20 sqm				₹ 11,489.25
	Rate per sqm.				₹ 574.46
		Say			₹ 574.50

**NOMINAL MIX CONCRETE AS PRESCRIBED IN IS : 456
(NOMINAL MIX IN LIEU OF DESIGN MIX)**

Advent of Crude Method of Manufactured Concrete

The cement concrete structures are being constructed in India right from pre-independence days. However in those days the only practice that was followed for mixing cement concrete was the arbitrary mix proportions like, concrete mix 1:3:6, 1:2:4, 1:1½:3, 1:1:2 etc.

This method of proportioning was totally official even after independence till the year 1964 when the standard IS : 456 was revised by the Bureau of Indian Standards. This concrete was designated as controlled concrete, wherein the concrete grades M-100 to M-400 under design mix was proposed and the crude method of volumetric proportions like mix 1:2:4, 1:1½:3, 1:1:2 were totally discarded.

It was nearly 44 years back the IS : 456-1964 recommended an alternative method of mixing cement concrete in lieu of controlled concrete (Design mix) as given below:

“Where it is considered not practicable to use controlled concrete, ordinary concrete may be used for concrete of grade M 100, M 150, M 200, M 250. The proportions of materials for nominal concrete mixes for ordinary concrete shall be in accordance with Table No.3” and this Table No.3 is noting but Table No.4.7 in Chapter No.4 of the revised specifications of CPWD.

It should be very clearly understood that these proportions shall not be equated to any grades of concrete under design mix or nominal mix under design mix.

EXPLANATION ON NOMINAL MIX IN LIEU OF DESIGN MIX

Nominal Mix Concrete

The correct meaning of nominal mix concrete is semi design mix where the mix proportions for different grades of concrete are not based on the mix design formulated in the laboratories under expert guidance but executing the work as per the mix proportions prescribed for different grades of concrete under nominal mix in IS : 456-2000 and also in the recently revised chapter 4 of CPWD Specifications, with the basis of mass of individual aggregates with respect of 50 kg of cement. As per IS : 456-2000 and Chapter 4 of recently revised CPWD Specifications, severe environmental exposure conditions i.e. structures to be constructed in hilly regions of Tripura where concrete grade Mix M-20 shall not be used for RCC works but only for plain cement concrete works.

A very important thing to be noted is that concrete grade Mix M-20 shall not be used for any RCC work in foundations in any environmental exposures in the country i.e. concrete grade Mix M-20 shall not be used for RCC members below ground in any part of the country.

Thus, for all practical purposes, only concrete grade M-25 and higher grades with design mix shall be used for plain cement concrete works. However, Concrete Grade M-20 can be used for RCC works in members not exposed to atmosphere. In order works, all grades of concrete right from grade mix M-5 to concrete grade mix M-20 prescribed under nominal mix concrete under design mix in Table 4.7 of Chapter 4 of the revised CPWD Specifications shall be confined to plain cement concrete and RCC works inside a building.

It is observed that a number of Engineers are inclined to switch over to the procedure of design mix but they are not having ready references or materials to based the rates for different grades of concrete under either design mix or nominal mix, and as the rates for the items cannot be decided the whole theory howsoever foolproof.

Code	Discription	Unit	Quantity	Rate	Amount

We have therefore formulated the various items in this book for different grades of concrete under nominal mix and design mix and worked out in detail the analysis of the item to calculate the correct rate for the execution of work which shall be of immense help to the engineers desirous of following the new method.

The analysis for various grades of concrete worked out in the Chapter is for items of plain cement concrete work.

To precede with the analysis of rates for the different grades of concrete it is essential to study the various stipulations in the Specifications.

We are therefore reproducing the matter on the subject relating to plain cement concrete work as prescribed in Chapter 4 of the revised CPWD Specifications.

Technical Details for Analysing Rates of Items with Nominal Mix Concrete

(A) Grades of Concrete

Group	Grade Designation	Specified characteristic compressive strength of 150 mm cube at 28 days	
Ordinary Concrete	M 10	10 N/mm ²	100 kg/cm ²
	M 15	15 N/mm ²	150 kg/cm ²
	M 20	20 N/mm ²	200 kg/cm ²

(B) Minimum Cement Content for Plain Concrete

Minimum cement content, maximum water-cement ratio and minimum grade of concrete for different exposures with normal weight aggregates of 20 mm nominal maximum size in Plain Concrete.

Plain Concrete (Table 4.6 CPWD Specifications)

Exposure	Min. Cement Content kg/m ³	Max. Free Water Cement Ratio	Min. Grade of Concrete
Mild	220	0.6	-
Moderate	240	0.6	M15
Severe	250	0.5	M20
Very Severe	260	0.45	M20
Extreme	280	0.40	M25

(i) Minimum grade for plain concrete under mild exposure condition is not specified.

(ii) The above minimum cement content and maximum water cement ratio apply only to 20 mm nominal maximum size aggregate. For other sizes of aggregate, these should be changed as per Table 6 of IS : 456-2000.

(iii) Concrete of grades lower than those given under grades of concrete as above may be used for plain concrete constructions, lean concrete simple foundations, foundation for masonry walls and other simple or temporary reinforced concrete constructions.

(C) Minimum Cement Content for RCC Works

Reinforced Concrete (Table 4.6 CPWD Specifications)

Exposure	Minimum Cement content Kg/m ³	Max. Free Water Cement Ratio	Minimum Grade of Concrete	Explanation of Mild Exposure as per Table 10 of CPWD Specifications
Mild	300	0.55	M20	Mild Exposure refer to concrete surfaces protected against weather or aggressive conditions, except those situated in coastal area.
Moderate	300	0.5	M25	
Severe	320	0.45	M30	
Very Severe	340	0.45	M35	
Extreme	360	0.4	M40	

Conclusion : Considering exposure conditions, concrete Grade M-20 should not be used for RCC members exposed to atmosphere and also in touch with non aggressive soils i.e. in foundations.

(D) Table 6 of IS : 456-2000

Code	Discription	Unit	Quantity	Rate	Amount

Adjustments to Minimum Cement Contents for Aggregates other than 20 mm Nominal Maximum Size

Nominal Maximum aggregate size	Adjustments to minimum cement contents in the table above
10 mm	(+) 40 kg/cum
20 mm	0
40 mm	(-) 30 kg/cum

(E) Nominal Mix Concrete

(i) Nominal mix concrete may be used for concrete of M-20 or lower. The proportions of materials for nominal mix concrete shall be as given in the table below.

(ii) The cement content of the mix specified in table below for any nominal mix shall be proportionately increased if the quantity of water in a mix has to be increased to overcome the difficulties of placement and compaction, so that the water cement ratio as specified is not exceeded.

Grade of Concrete	Total quantity of Dry Aggregates by mass per 50 kg of cement to be taken as the sum of the individual masses of fine and coarse aggregates, max.	Proportion of fine aggregate to coarse aggregate (by mass)	Quantity of water per 50 kg of cement, max
M5	800 kg	Generally 1:2 but subject to an upper limit of 1:1½ and a lower limit of 1:2½	60
M7.5	625 kg		45
M10	480 kg		34
M15	330 kg		32.00
M20	250 kg		30.00

Note : The proportions of fine to coarse aggregates should be adjusted from upper limit to lower limit progressively as the grading of fine aggregates becomes finer and the maximum size of coarse aggregate becomes larger.

Example : For an average grading of fine aggregate (that is, zone II of Table 4 of IS : 383) the proportions shall be 1:1½, 1:2 and 1:2½ for maximum size of aggregates 10 mm, 20 mm and 40 mm respectively.

(F) Batching

(i) To avoid confusion and error in batching, consideration should be given to using the smallest number of different concrete, the quantity of both cement and aggregate shall be determined by mass, admixture if solid, by mass, liquid admixture may however be measured in volume or mass, water shall be weighed or measured by volume in a calibrated tank.

(ii) Volume batching may be allowed only where weigh batching is not practical and provided accurate bulk densities of materials to be actually used in concrete have earlier been established. Allowance for bulking shall be made in accordance with IS : 2386 (Part-III). The mass volume relationship should be checked as frequently as necessary, the frequency for the given job being determined by Engineer-in-Charge to ensure that the specified grading is maintained.

Important Note

The quantities on volumetric basis adopted in the following pages for working out the analysis of Rates for concrete Grade M-5 to Grade M-20 are not for direct execution, but only for calculating the rates of the item.

The reader should get the work executed only on mass basis with weigh-batching as per the nominal mix proportion with mass given in remarks column of analysis of each grade of concrete.

It is only when weigh batching is not practicable and mostly for un-important small works, the batching by column can be done after ascertaining the weight of ingredients to be actually used on the work and thus calculating the volume of ingredients.

Code	Discription	Unit	Quantity	Rate	Amount
4.6.1	Providing and laying in position plain cement concrete of specified grade under nominal mix concrete in lieu of design mix concrete with proportions as specified in table 4.7 of Chapter 4 of the CPWD Specifications, excluding the cost of centring and shuttering for all works upto plinth level -				
4.6.1.1	Concrete grade M-5 for lean concrete / levelling course with 40 mm nominal size aggregate				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Calculation of proportion for 1 cum of concrete: Considering that an average quantity of 0.94 cum of coarse aggregate required to produce one cum of concrete = Qty of cement required = $0.94/0.38 = 2.47$ bags of 50 kg. Quantity of sand required = $2.47 \times 0.146 = 0.361$ cum The proportion of one cum of concrete = Cement : Sand : Stone aggregate = 2.47 bags : 0.361 cum : 0.94 cum (i) However as explained in IS:456 and also the minimum quantity of cement that can be reduced due to the usage of 40 mm nominal size aggregate (Larger size aggregate than 20 mm) given in Table No. 6 of IS:456-2000 is 30 kg/cum. (ii) The quantity of cement consumption to be considered when 40 mm nominal size aggregate is used = $2.47 \times 50 \text{ kg} = 123.50 \text{ kg} - 30 \text{ kg} = 93.50 \text{ kg}$ or 0.935 q (iii) 28 days cube strength of this mix shall be 5 N/mm² or 50 kg/cm² (iv) Mix proportion by mass cement : 50 kg, Fine aggregate : 230 kg, Coarse Aggregate : 570 kg. Considering the weight of coarse aggregate per cum = 1500 kg and fine aggregate (sand) as 1575 kg. (v) The mix proportion on volumetric basis = 1 bag cement (50 kg) : 0.146 cum sand : 0.38 cum coarse aggregate. (vi) The combination of coarse aggregate can be considered as 40% quantity 20 mm graded stone aggregate and 60% quantity 40 mm graded stone aggregate. However for producing dense mix the proportions of 40 mm and 20 mm aggregate shall be altered as per the direction of Engineer-in-Charge.				
	MATERIALS				
04004	Stone aggregate 40mm nominal size 60% of 0.94 cum	cum	0.564	₹ 3,532.00	₹ 1,992.05
04006	Stone aggregate 20mm nominal size 40% of 0.94 cum	cum	0.376	₹ 3,969.00	₹ 1,492.34
02003	Fine sand	cum	0.361	₹ 370.00	₹ 133.57
03001	Cement	tonne	0.094	₹ 6,100.00	₹ 573.40
	CARRIAGE				

Code	Discription	Unit	Quantity	Rate	Amount
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.361	₹ 142.63	₹ 51.49
0421	Cement	tonne	0.094	₹ 110.94	₹ 10.43
	LABOUR:				
0216	Foreman	Day	0.075	₹ 425.00	₹ 31.88
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.150	₹ 300.00	₹ 45.00
					₹ 4,950.33
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2.5%		₹ 123.76
					₹ 5,074.09
	Add for Sundries and contingencies	@	3%		₹ 152.22
					₹ 5,226.31
	Add for water charges	@	1%		₹ 52.26
					₹ 5,278.57
	Add for contractor's profit and overheads	@	15%		₹ 791.79
	Cost of providing and laying 1 cum. of cement concrete by nominal mix for concrete Grade M-5				₹ 6,070.36
	Rate per cum.	Say			₹ 6,070.40

4.6.1	Providing and laying in position plain cement concrete of specified grade under nominal mix concrete in lieu of design mix concrete with proportions as specified in table 4.7 of Chapter 4 of the CPWD Specifications, excluding the cost of centring and shuttering for all works upto plinth level -				
4.6.1.2	Concrete grade M-7.5 for lean concrete / levelling course with 40 mm nominal size aggregate				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				

Code	Discription	Unit	Quantity	Rate	Amount
	Calculation of proportion for 1 cum of concrete: (i) 28 days cube strength of this mix shall be 7.5 N/mm² or 75 kg/cm² (ii) Mix proportion by mass = Cement : 50 kg, Fine aggregate : 180kg, Coarse Aggregate : 445 kg Considering the weight of coarse aggregate per cum = 1500 kg and fine aggregate (sand) = 1575 kg. (iii) The mix proportion on volumetric basis = 1 Bag of Cement (50kg), Fine aggregate = 0.114 cum, Coarse aggregate = 0.297 cum (iv) The combination of coarse aggregate can be considered as 40% quantity 20 mm graded stone aggregate and 60% quantity 40 mm graded stone aggregate. However for producing the dense mix the proportions of 40 mm and 20 mm coarse aggregates shall be altered as per the direction of Engineer-in-Charge. (v) Calculation of proportion for one cum of concrete. Considering that an average quantity of 0.94 cum of coarse aggregate required to produce one cum of concrete. Quantity of cement required = $0.94/0.297 = 3.165$ bags of 50 kg, quantity of sand required = $3.165 \times 0.114 = 0.361$ cum (vi) The proportion for one cum of concrete = Cement - 3.165 bags : Sand - 0.361 cum : Coarse Aggregate - 0.94 cum. (vii) The quantity of cement consumption to be considered when 40 mm Nominal size Aggregate is used = $3.165 \times 50 = 158.25\text{kg} - 30 \text{ kg.} = 128.250\text{kg} = 1.2825\text{q.}$				
	MATERIALS				
04004	Stone aggregate 40mm nominal size 60% of 0.94 cum	cum	0.564	₹ 3,532.00	₹ 1,992.05
04006	Stone aggregate 20mm nominal size 40% of 0.94 cum	cum	0.376	₹ 3,969.00	₹ 1,492.34
02003	Fine sand	cum	0.361	₹ 370.00	₹ 133.57
03001	Cement	tonne	0.128	₹ 6,100.00	₹ 780.80
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.361	₹ 142.63	₹ 51.49
0421	Cement	tonne	0.128	₹ 110.94	₹ 14.20
	LABOUR:				
0216	Foreman	Day	0.075	₹ 425.00	₹ 31.88
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.150	₹ 300.00	₹ 45.00
					₹ 5,161.50

Code	Discription	Unit	Quantity	Rate	Amount
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2%		₹ 121.30
					₹ 5,282.80
	Add for Sundries and contingencies	@	3%		₹ 158.48
					₹ 5,441.28
	Add for water charges	@	1%		₹ 54.41
					₹ 5,495.69
	Add for contractor's profit and overheads	@	15%		₹ 824.35
	Cost of providing and laying 1 cum. of cement concrete by nominal mix for concrete Grade M-7.5				₹ 6,320.04
	Rate per cum.	Say			₹ 6,320.00

4.6.1	Providing and laying in position plain cement concrete of specified grade under nominal mix concrete in lieu of design mix concrete with proportions as specified in table 4.7 of Chapter 4 of the CPWD Specifications, excluding the cost of centring and shuttering for all works upto plinth level -				
4.6.1.3	Concrete grade M-10 for base course with 40 mm maximum size stone aggregate				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Calculation of proportion for 1 cum Concrete (i) 28 days cube strength of this mix shall be 10 N/mm² or 100 kg/cm² (ii) Mix proportion by mass = Cement : 50 kg, Fine aggregate : 140kg, Coarse Aggregate : 340 kg Considering the weight of coarse aggregate per cum = 1500 kg and fine aggregate (sand) = 1575 kg. (iii) The mix proportion on volumetric basis = 1 Bag of Cement (50kg), Fine aggregate = 0.089 cum, Coarse aggregate = 0.227 cum (iv) The combination of coarse aggregate can be considered as 40% quantity 20 mm graded stone aggregate and 60% quantity 40 mm graded stone aggregate. However for producing the dense mix the proportions of 40 mm and 20 mm coarse aggregates shall be altered as per the direction of Engineer-in-Charge.				

Code	Description	Unit	Quantity	Rate	Amount
	(v) Calculation of proportion for one cum of concrete. Considering that an average quantity of 0.94 cum of coarse aggregate required to produce one cum of concrete. Quantity of cement required = $0.94/0.227 = 4.14$ bags of 50 kg, quantity of sand required = $4.14 \times 0.089 = 0.368$ cum (vi) The proportion for one cum of concrete = Cement - 4.14 bags : Sand - 0.368 cum : Coarse Aggregate - 0.94 cum. (vii) The quantity of cement consumption to be considered when 40 mm Nominal size Aggregate is used = $4.14 \times 50 = 207$ kg - 30 kg. = 177 kg = 1.77q.				
	MATERIALS				
04004	Stone aggregate 40mm nominal size 60% of 0.94 cum	cum	0.564	₹ 3,532.00	₹ 1,992.05
04006	Stone aggregate 20mm nominal size 40% of 0.94 cum	cum	0.376	₹ 3,969.00	₹ 1,492.34
02003	Fine sand	cum	0.368	₹ 370.00	₹ 136.16
03001	Cement	tonne	0.177	₹ 6,100.00	₹ 1,079.70
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.368	₹ 142.63	₹ 52.49
0421	Cement	tonne	0.177	₹ 110.94	₹ 19.64
	LABOUR:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.75	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,502.55
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2.1%		₹ 115.55
					₹ 5,618.10
	Add for Sundries and contingencies	@	3%		₹ 168.54
					₹ 5,786.64
	Add for water charges	@	1%		₹ 57.87
					₹ 5,844.51
	Add for contractor's profit and overheads	@	15%		₹ 876.68
	Cost of providing and laying 1 cum. of cement concrete by nominal mix for concrete Grade M-10				₹ 6,721.19
	Rate per cum.	Say			₹ 6,721.20

4.6.1	Providing and laying in position plain cement concrete of specified grade under nominal mix concrete in lieu of design mix concrete with proportions as specified in table 4.7 of Chapter 4 of the CPWD Specifications, excluding the cost of centring and shuttering for all works upto plinth level -
4.6.1.4	Concrete grade M-10 for base course with 20 mm maximum size stone aggregate

Code	Discription	Unit	Quantity	Rate	Amount
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Calculation of proportion for 1 cum Concrete (i) 28 days cube strength of this mix shall be 10 N/mm² or 100 kg/cm² (ii) Mix proportion by mass = Cement : 50 kg, Fine aggregate : 160kg, Coarse Aggregate : 320 kg Considering the weight of coarse aggregate per cum = 1500 kg and fine aggregate (sand) = 1575 kg. (iii) The mix proportion on volumetric basis = 1 Bag of Cement (50kg), Fine aggregate = 0.102 cum, Coarse aggregate = 0.21 cum (iv) The combination of coarse aggregate can be considered as 25% quantity 12 mm graded stone aggregate and 75% quantity 20 mm graded stone aggregate. However for producing the dense mix the proportions of 12 mm and 20 mm coarse aggregates shall be altered as per the direction of Engineer-in-Charge. (v) Calculation of proportion for one cum of concrete. Considering that an average quantity of 0.92 cum of coarse aggregate required to produce one cum of concrete. Quantity of cement required = $0.92/0.21 = 4.39$ bags of 50 kg, quantity of sand required = $4.39 \times 0.102 = 0.448$ cum (vi) The proportion for one cum of concrete = Cement - 4.39 bags : Sand - 0.448 cum : Coarse Aggregate - 0.92 cum.				
	MATERIALS				
04006	Stone aggregate 20mm nominal size 75% of 0.92 cum	cum	0.69	₹ 3,969.00	₹ 2,738.61
04007	Stone aggregate 12mm nominal size 25% of 0.94 cum	cum	0.23	₹ 4,005.00	₹ 921.15
02003	Fine sand	cum	0.448	₹ 370.00	₹ 165.76
03001	Cement	tonne	0.22	₹ 6,100.00	₹ 1,342.00
	CARRIAGE				
0405	Stone aggregate	cum	0.92	₹ 159.75	₹ 146.97
0425	Fine sand	cum	0.448	₹ 142.63	₹ 63.90
0421	Cement	tonne	0.22	₹ 110.94	₹ 24.41
	LABOUR:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.75	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,982.80

Code	Discription	Unit	Quantity	Rate	Amount
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.9%		₹ 113.67
					₹ 6,096.47
	Add for Sundries and contingencies	@	3%		₹ 182.89
					₹ 6,279.36
	Add for water charges	@	1%		₹ 62.79
					₹ 6,342.15
	Add for contractor's profit and overheads	@	15%		₹ 951.32
	Cost of providing and laying 1 cum. of cement concrete by nominal mix for concrete Grade M-10				₹ 7,293.47
	Rate per cum.	Say			₹ 7,293.50

4.6.1	Providing and laying in position plain cement concrete of specified grade under nominal mix concrete in lieu of design mix concrete with proportions as specified in table 4.7 of Chapter 4 of the CPWD Specifications, excluding the cost of centring and shuttering for all works upto plinth level -				
4.6.1.5	Concrete grade M-15 for base course with 40 mm maximum size stone aggregate				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Calculation of proportion for 1 cum Concrete (i) 28 days cube strength of this mix shall be 15 N/mm² or 150 kg/cm² (ii) Mix proportion by mass = Cement : 50 kg, Fine aggregate : 95kg, Coarse Aggregate : 235 kg Considering the weight of coarse aggregate per cum = 1500 kg and fine aggregate (sand) = 1575 kg. (iii) The mix proportion on volumetric basis = 1 Bag of Cement (50kg), Fine aggregate = 0.06 cum, Coarse aggregate = 0.157 cum (iv) The combination of coarse aggregate can be considered as 40% quantity 20 mm graded stone aggregate and 60% quantity 40 mm graded stone aggregate. However for producing the dense mix the proportions of 40 mm and 20 mm coarse aggregates shall be altered as per the direction of Engineer-in-Charge.				

Code	Description	Unit	Quantity	Rate	Amount
	(v) Calculation of proportion for one cum of concrete. Considering that an average quantity of 0.94 cum of coarse aggregate required to produce one cum of concrete. Quantity of cement required = $0.94/0.157 = 5.99$ bags of 50 kg, quantity of sand required = $5.99 \times 0.06 = 0.359$ cum (vi) The proportion for one cum of concrete = Cement - 5.99 bags : Sand - 0.359 cum : Coarse Aggregate - 0.94 cum. (vii) The quantity of cement consumption to be considered when 40 mm Nominal size Aggregate is used = $5.99 \times 50 = 299.5$ kg - 30 kg. = 269.5 kg = 2.7q.				
	MATERIALS				
04004	Stone aggregate 40mm nominal size 60% of 0.94 cum	cum	0.564	₹ 3,532.00	₹ 1,992.05
04006	Stone aggregate 20mm nominal size 40% of 0.94 cum	cum	0.376	₹ 3,969.00	₹ 1,492.34
02003	Fine sand	cum	0.359	₹ 370.00	₹ 132.83
03001	Cement	tonne	0.27	₹ 6,100.00	₹ 1,647.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.359	₹ 142.63	₹ 51.20
0421	Cement	tonne	0.27	₹ 110.94	₹ 29.95
	LABOUR:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,105.54
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.8%		₹ 106.85
					₹ 6,212.39
	Add for Sundries and contingencies	@	3%		₹ 186.37
					₹ 6,398.76
	Add for water charges	@	1%		₹ 63.99
					₹ 6,462.75
	Add for contractor's profit and overheads	@	15%		₹ 969.41
	Cost of providing and laying 1 cum. of cement concrete by nominal mix for concrete Grade M-15				₹ 7,432.16
	Rate per cum.	Say			₹ 7,432.20

4.6.1	Providing and laying in position plain cement concrete of specified grade under nominal mix concrete in lieu of design mix concrete with proportions as specified in table 4.7 of Chapter 4 of the CPWD Specifications, excluding the cost of centring and shuttering for all works upto plinth level -
4.6.1.6	Concrete grade M-15 for base course with 20 mm maximum size stone aggregate

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Calculation of proportion for 1 cum Concrete (i) 28 days cube strength of this mix shall be 15 N/mm² or 150 kg/cm² (ii) Mix proportion by mass = Cement : 50 kg, Fine aggregate : 110kg, Coarse Aggregate : 220 kg Considering the weight of coarse aggregate per cum = 1500 kg and fine aggregate (sand) = 1575 kg. (iii) The mix proportion on volumetric basis = 1 Bag of Cement (50kg), Fine aggregate = 0.07 cum, Coarse aggregate = 0.147 cum (iv) The combination of coarse aggregate can be considered as 25% quantity 12 mm graded stone aggregate and 75% quantity 20 mm graded stone aggregate. However for producing the dense mix the proportions of 12 mm and 20 mm coarse aggregates shall be altered as per the direction of Engineer-in-Charge. (v) Calculation of proportion for one cum of concrete. Considering that an average quantity of 0.92 cum of coarse aggregate required to produce one cum of concrete. Quantity of cement required = $0.92/0.147 = 6.26$ bags of 50 kg, quantity of sand required = $6.26 \times 0.07 = 0.438$ cum (vi) The proportion for one cum of concrete = Cement - 6.26 bags : Sand - 0.438 cum : Coarse Aggregate - 0.92 cum.				
	MATERIALS				
04006	Stone aggregate 20mm nominal size 75% of 0.92 cum	cum	0.69	₹ 3,969.00	₹ 2,738.61
04007	Stone aggregate 12mm nominal size 25% of 0.94 cum	cum	0.23	₹ 4,005.00	₹ 921.15
02003	Fine sand	cum	0.438	₹ 370.00	₹ 162.06
03001	Cement	tonne	0.313	₹ 6,100.00	₹ 1,909.30
	CARRIAGE				
0405	Stone aggregate	cum	0.92	₹ 159.75	₹ 146.97
0425	Fine sand	cum	0.438	₹ 142.63	₹ 62.47
0421	Cement	tonne	0.313	₹ 110.94	₹ 34.72
	LABOUR:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,585.28
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.7%		₹ 111.95

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 6,697.23
	Add for Sundries and contingencies	@	3%		₹ 200.92
					₹ 6,898.15
	Add for water charges	@	1%		₹ 68.98
					₹ 6,967.13
	Add for contractor's profit and overheads	@	15%		₹ 1,045.07
	Cost of providing and laying 1 cum. of cement concrete by nominal mix for concrete Grade M-15				₹ 8,012.20
	Rate per cum.	Say			₹ 8,012.20

4.6.1	Providing and laying in position plain cement concrete of specified grade under nominal mix concrete in lieu of design mix concrete with proportions as specified in table 4.7 of Chapter 4 of the CPWD Specifications, excluding the cost of centring and shuttering for all works upto plinth level -				
4.6.1.7	Concrete grade M-15 only for plain concrete with 10mm/ 12mm maximum size stone aggregate				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Calculation of proportion for 1 cum Concrete (i) 28 days cube strength of this mix shall be 15 N/mm² or 150 kg/cm² (ii) Mix proportion by mass = Cement : 50 kg, Fine aggregate : 130kg, Coarse Aggregate : 200 kg Considering the weight of coarse aggregate per cum = 1500 kg and fine aggregate (sand) = 1575 kg. (iii) The mix proportion on volumetric basis = 1 Bag of Cement (50kg), Fine aggregate = 0.083 cum, Coarse aggregate = 0.133 cum (v) Calculation of proportion for one cum of concrete. Considering that an average quantity of 0.90 cum of coarse aggregate required to produce one cum of concrete. Quantity of cement required = $0.90/0.133 = 6.77$ bags of 50 kg, quantity of sand required = $6.77 \times 0.083 = 0.562$ cum (vi) The proportion for one cum of concrete = Cement - 6.77 bags : Sand - 0.562 cum : Coarse Aggregate - 0.90 cum. (vii) However, the minimum quantity of cement has to be increased due to usage of 10mm / 12.5mm Nominal size aggregate (smaller size aggregate than 20 mm) given in Table No. 6 of IS:456-2000 as 40kg/cum. The quantity of cement consumption to be considered when 10mm / 12.5mm Nominal size Aggregate is used = $6.77 \times 50 = 338.5$ kg + 40 kg. = 378.5kg = 3.79q.				
	MATERIALS				

Code	Discription	Unit	Quantity	Rate	Amount
04007	Stone aggregate 10mm/12mm nominal size	cum	0.9	₹ 3,532.00	₹ 3,178.80
02003	Fine sand	cum	0.562	₹ 370.00	₹ 207.94
03001	Cement	tonne	0.379	₹ 6,100.00	₹ 2,311.90
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.562	₹ 142.63	₹ 80.16
0421	Cement	tonne	0.379	₹ 110.94	₹ 42.05
	LABOUR:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.75	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,544.63
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.7%		₹ 107.99
					₹ 6,652.62
	Add for Sundries and contingencies	@	3%		₹ 199.58
					₹ 6,852.20
	Add for water charges	@	1%		₹ 68.52
					₹ 6,920.72
	Add for contractor's profit and overheads	@	15%		₹ 1,038.11
	Cost of providing and laying 1 cum. of cement concrete by nominal mix for concrete Grade M-15				₹ 7,958.83
	Rate per cum.	Say			₹ 7,958.80

4.6.1	Providing and laying in position plain cement concrete of specified grade under nominal mix concrete in lieu of design mix concrete with proportions as specified in table 4.7 of Chapter 4 of the CPWD Specifications, excluding the cost of centring and shuttering for all works upto plinth level -				
4.6.1.8	Concrete grade M-20 for RCC works in limited items and for plain concrete works with 20 mm maximum size stone aggregate				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				

Code	Discription	Unit	Quantity	Rate	Amount
	Calculation of proportion for 1 cum Concrete (i) 28 days cube strength of this mix shall be 20 N/mm² or 200 kg/cm² (ii) Mix proportion by mass = Cement : 50 kg, Fine aggregate : 85kg, Coarse Aggregate :165 kg Considering the weight of coarse aggregate per cum = 1500 kg and fine aggregate (sand) = 1575 kg. (iii)The mix proportion on volumetric basis = 1 Bag of Cement (50kg), Fine aggregate = 0.054 cum, Coarse aggregate = 0.11 cum (iv) The combination of coarse aggregate can be considered as 25% quantity 12 mm graded stone aggregate and 75% quantity 20 mm graded stone aggregate. However for producing the dense mix the proportions of 12 mm and 20 mm coarse aggregates shall be altered as per the direction of Engineer-in-Charge. (v) Calculation of proportion for one cum of concrete. Considering that an average quantity of 0.89 cum of coarse aggregate required to produce one cum of concrete. Quantity of cement required = $0.89/0.11 = 8.1$ bags of 50 kg, quantity of sand required = $8.1 \times 0.054 = 0.44$ cum (vi) The proportion for one cum of concrete = Cement - 8.1 bags : Sand - 0.44 cum : Coarse Aggregate - 0.89 cum.				
	MATERIALS				
04006	Stone aggregate 20mm nominal size 75% of 0.89 cum	cum	0.67	₹ 3,969.00	₹ 2,659.23
04007	Stone aggregate 12mm nominal size 25% of 0.89 cum	cum	0.22	₹ 4,005.00	₹ 881.10
02003	Fine sand	cum	0.44	₹ 370.00	₹ 162.80
03001	Cement	tonne	0.405	₹ 6,100.00	₹ 2,470.50
	CARRIAGE				
0405	Stone aggregate	cum	0.89	₹ 159.75	₹ 142.18
0425	Fine sand	cum	0.44	₹ 142.63	₹ 62.76
0421	Cement	tonne	0.405	₹ 110.94	₹ 44.93
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 7,044.13
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.5%		₹ 105.66
					₹ 7,149.79
	Add for Sundries and contingencies	@	3%		₹ 214.49

Code	Discription	Unit	Quantity	Rate	Amount
					₹ 7,364.28
	Add for water charges	@	1%		₹ 73.64
					₹ 7,437.92
	Add for contractor's profit and overheads	@	15%		₹ 1,115.69
	Cost of providing and laying 1 cum. of cement concrete by nominal mix for concrete Grade M-20				₹ 8,553.61
	Rate per cum.	Say			₹ 8,553.60

S U B - H E A D - 5



R E I N F O R C E D C E M E N T C O N C R E T E W O R K

**SUB HEAD : 5.0 / REINFORCED CEMENT CONCRETE WORK
BASIC RATES**

Code No.	Description	Unit	Rate
0201	Bandhani	Day	₹ 300.00
0205	Bhisti/Waterman	Day	₹ 300.00
0206	Blacksmith 1st class	Day	₹ 425.00
0209	Carpenter 1st class	Day	₹ 425.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0216	Foreman	Day	₹ 425.00
0202	Bar -bender	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0224	Mate	Day	₹ 300.00
0218*	Mason (average)	Day	₹ 400.00
0208*	Carpenter (average)	Day	₹ 400.00
05044	Non - Asbestos multi purpose fibre cement board 6mm thick.	sqm	₹ 225.00
06002	Brick [2nd Class]	each	₹ 6.69
04001	Brick Aggregate (Single size) : 40 mm nominal size	cum	₹ 2,550.00
04002	Brick Aggregate (Single size) : 20 mm nominal size	cum	₹ 2,975.00
04003	Brick Aggregate (Single size) : 12 mm nominal size	cum	₹ 3,075.00
04004	Stone Aggregate (Single size) : 40 mm nominal size	cum	₹ 3,532.00
04005	Stone Aggregate (Single size) : 25 mm nominal size	cum	₹ 3,969.00
04006	Stone Aggregate (Single size) : 20 mm nominal size	cum	₹ 3,969.00
04007	Stone Aggregate (Single size) : 12 mm nominal size	cum	₹ 4,005.00
04008	Stone Aggregate (Single size) : 10 mm nominal size	cum	₹ 4,040.00
04009	Stone Aggregate (Single size) : 06 mm nominal size	cum	₹ 3,750.00
04010	Local ballies 100/125 mm diameter	metre	₹ 59.00
04011	Paving bitumen S-90 of approved quality	tonne	₹ 36,820.00

Code No.	Description	Unit	Rate
05006	Bitumen [Blown type petroleum] of penetration 85/25 of approved quality	tonne	₹ 36,820.00
05005	Bitumen solution primer of approved quality	litre	₹ 52.00
05024	Flame retardant face insulating, Impregnated fibre board 12 mm thick	sqm	₹ 415.00
03001	Cement [Portland]	tonne	₹ 6,100.00
04012	Coal (steam)	quintal	₹ 890.00
05033	Hessian cloth	sqm	₹ 28.00
05020	Cement Concrete Jali 50 mm thick	sqm	₹ 373.00
05019	Cement Concrete Jali 40 mm thick	sqm	₹ 318.00
05018	Cement Concrete Jali 25 mm thick	sqm	₹ 234.00
02004	Kerosene oil	litre	₹ 48.00
05021	Copper plate	kilogram	₹ 322.00
02003	Sand (Fine): Selected quarry	cum	₹ 370.00
05038	Mild steel round bar 12 mm dia and below	quintal	₹ 4,055.00
05039	Mild steel round bar above 12 mm dia	quintal	₹ 4,010.00
05040	Average rate of Mild steel round bars for reinforcements	quintal	₹ 4,032.00
05062	Twisted steel / deformed bars	quintal	₹ 4,102.00
05042	Mild steel square bars	quintal	₹ 4,140.00
05056	Structural steel such as tees, angles channels and R.S. joists	quintal	₹ 4,267.00
05026	Flats up to 10 mm in thickness	quintal	₹ 3,992.00
05041	Mild steel sheets for tanks	quintal	₹ 4,532.00
05034	Mild steel expanded metal 20x60 mm strands	sqm	₹ 314.00
05032	Hard drawn steel wire fabric	sqm	₹ 535.00
05027	Galvanised steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	₹ 12.00
05043	Mild stel bolts 6 mm dia and 25 mm long with hexagonal head	10 Nos	₹ 27.00
05053	Straining bolts	each	₹ 79.00
05028	Galvanised steel bolts & nuts 10 mm dia and 27 cm long both sides threaded with 4 galvanised steel nuts	each	₹ 22.00
05030	Galvanised steel bolts 10 mm dia and 7 cm long with nuts	each	₹ 14.00
05017	Bolts and nuts up to 300 mm in length	quintal	₹ 5,200.00

Code No.	Description	Unit	Rate
05016	Bolts and nuts above 300 mm in length	quintal	₹ 5,350.00
05001	12 mm dia steel pegs	quintal	₹ 5,050.00
04013	Second class local wood in scantling	10 cudm	₹ 137.00
04014	Second class local wood in planks	10 cudm	₹ 145.00
04015	Water proofing materials	kilogram	₹ 36.00
05066	Wire nails	kilogram	₹ 66.00
05031	Hard drawn steel wire	quintal	₹ 5,268.00
05008	Bolts and nuts 16 mm dia 65 mm long	each	₹ 13.00
05009	Bolts and nuts 20 mm dia 65 mm long	each	₹ 19.00
05010	Bolts and nuts 20 mm dia 70 mm long	each	₹ 19.00
05011	Bolts and nuts 20 mm dia 75 mm long	each	₹ 19.00
05012	Bolts and nuts 20 mm dia 80 mm long	each	₹ 20.00
05013	Bolts and nuts 24 mm dia 85 mm long	each	₹ 38.00
05014	Bolts and nuts 24 mm dia 90 mm long	each	₹ 40.00
05015	Bolts and nuts 27 mm dia 100 mm long	each	₹ 47.00
05055	Strips-Aluminium fluted 3.15mm thick and 150mm wide	metre	₹ 245.00
05054	Strips Aluminium fluted 3.15mm thick and 200mm wide metre	Metre	₹ 347.00
05047	Ply wood 5 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	₹ 722.00
05050	Rawl plug 50 mm (designation 10 no.)	each	₹ 7.00
05046	Plasticizer / super plasticizer	kilogram	₹ 41.00
05064	Wall form panel 1250x500 mm	each	₹ 1,698.00
05057	Tie bolt 12 mm dia 100 mm length	each	₹ 52.00
05058	Tie bolt 12 mm dia 150 mm length	each	₹ 69.00
05059	Tie bolt 12 mm dia 450 mm length	each	₹ 155.00
05060	Tie bolt 20 mm dia 150 mm length	each	₹ 98.00
05061	Tie bolt 20 mm dia 225 mm length	each	₹ 121.00
05051	Spring coil 12 mm	each	₹ 15.00
05045	Plastic cone 12 mm dia	each	₹ 18.00
04016	Double clip (bridge clip)	each	₹ 119.00

Code No.	Description	Unit	Rate
04017	Single clip	each	₹ 97.00
04018	M.S. tube 40 mm dia	metre	₹ 328.00
04019	M.S. tube 50 mm dia	metre	₹ 379.00
05063	Wall form panel 1250x450 mm	each	₹ 1,560.00
05022	Corner angle 45x45x5 m 2.50 m long	each	₹ 400.00
04020	Column clamp 450x1070 m	each	₹ 1,628.00
05048	Prop 2 m (2-3.5m)	each	₹ 1,155.00
05004	Binding wire	kilogram	₹ 58.00
05002	Adjustable span ESO+SI (2.35-3.40)	each	₹ 2,327.00
05003	Adjustable telescopic prop 3 m (2.02-3.75 m)	each	₹ 1,452.00
05052	Stirrup head	each	₹ 495.00
05049	Prop 4 m	each	₹ 1,584.00
05023	Double coupler	each	₹ 73.00
05065	Water proof ply 12mm thick.	sqm	₹ 702.00
05067	1 mm thick Stainless steel cover plate grade 304	kg	₹ 300.00
08241	Stainless steel screws	100 Nos.	₹ 208.00
05068	Coupler 16 mm dia	each	₹ 75.00
05069	Coupler 20 mm dia	each	₹ 98.00
05070	Coupler 25 mm dia	each	₹ 145.00
05071	Coupler 28 mm dia	each	₹ 215.00
05072	Coupler 32 mm dia	each	₹ 258.00
0467	Carriage: Steam coal	tonne	₹ 110.94
0406	Carriage: Bricks	1000 Nos	₹ 332.82
0405	Carriage: Brick/ Stone aggregate below 40 mm nominal size	cum	₹ 159.75
0473	Carriage: Timber	cum	₹ 80.65
0468	Carriage: Steel	tonne	₹ 110.94
0404	Carriage: Brick/ Stone aggregate 40 mm nominal size and above	cum	₹ 172.74
0421	Carriage: Cement	tonne	₹ 110.94
0472	Carriage: Tar bitumen	tonne	₹ 110.94
0425	Carriage: Fine Sand	cum	₹ 142.63
0454	Carriage: Soling stone & masonry stone	cum	₹ 239.43

SUB HEAD : 5.0**REINFORCED CEMENT CONCRETE WORK**

- Note: 1. Sand can be either coarse or fine as required/available. Here, provision of fine sand is considered only due to non-availability of coarse sand in Tripura. However, design of concrete dictates for use of coarse sand, then separate analysis may be made as per site condition.
2. The quantities of Cement, sand and coarse aggregates are as per Table No. 3.2. Chapter 4
3. Cement concrete with volumetric mix proportion cannot be termed as concrete of specific grade, because as per IS Code, only the design mix grades of concrete are specified as concrete grade M-15, concrete grade M-20 etc. Hence in this case it should be mix proportion 1:1:2, 1:2:4 etc. for batching with specified proportion.
4. The calculations are based on the assumption that 20 cum. to 25 cum. concrete would be laid in a day.
5. The provision of waterman is mainly for feeding water for mixing and other water requirements during concreting.
6. The expenses for curing will be covered by the provision of Water Charges.

REINFORCED CEMENT CONCRETE [CAST-IN-SITU] -UPTO PLINTH LEVEL					
5.10	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement-				
	-All work upto plinth level:				
5.1.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08
04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 8,282.09
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	2.00%		₹ 165.64
					₹ 8,447.73
	Add for testing stone aggregate, sand, water and concrete cubes etc.	@	0.35%		₹ 29.57
					₹ 8,477.30
	Add for Sundries and contingencies	@	3%		₹ 254.32
					₹ 8,731.62
	Add for water charges	@	1%		₹ 87.32
					₹ 8,818.94
	Add for contractor's profit and overheads	@	15%		₹ 1,322.84
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,141.78
	Rate per cum.	Say			₹ 10,141.80

5.10	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement-				
	-All work upto plinth level:				
5.1.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				

	MATERIALS				
04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,898.69
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.80%		₹ 124.18
					₹ 7,022.87
	Add for testing stone aggregate, sand, water and concrete cubes etc.	@	0.45%		₹ 31.60
					₹ 7,054.47
	Add for Sundries and contingencies	@	3%		₹ 211.63
					₹ 7,266.10
	Add for water charges	@	1%		₹ 72.66
					₹ 7,338.76
	Add for contractor's profit and overheads	@	15%		₹ 1,100.81
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,439.57
	Rate per cum.	Say			₹ 8,439.60

5.10	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement-				
	-All work upto plinth level:				
5.1.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				

0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,656.69
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.70%		₹ 113.16
					₹ 6,769.85
	Add for testing stone aggregate, sand, water and concrete cubes etc.	@	0.50%		₹ 33.85
					₹ 6,803.70
	Add for Sundries and contingencies	@	3%		₹ 204.11
					₹ 7,007.81
	Add for water charges	@	1%		₹ 70.08
					₹ 7,077.89
	Add for contractor's profit and overheads	@	15%		₹ 1,061.68
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,139.57
	Rate per cum.	Say			₹ 8,139.60

5.10	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement-				
	-All work upto plinth level:				
5.1.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,737.37
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.70%		₹ 97.54
					₹ 5,834.91

	Add for testing stone aggregate, sand, water and concrete cubes etc.	@	0.50%		₹ 29.17
					₹ 5,864.08
	Add for Sundries and contingencies	@	3%		₹ 175.92
					₹ 6,040.00
	Add for water charges	@	1%		₹ 60.40
					₹ 6,100.40
	Add for contractor's profit and overheads	@	15%		₹ 915.06
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,015.46
	Rate per cum.	Say			₹ 7,015.50

REINFORCED CEMENT CONCRETE [CAST-IN-SITU] ORDINARY MIX IN SUPERSTRUCTURE

Note: In multi-storeyed buildings these days concrete is lifted to the height with help of (i) Lift (ii) Crane (iii) Concrete pumps. The concrete is produced in centrally situated batching plant and transported to site by trucks etc. However, these calculations are made assuming that the coarse and fine aggregate are batched on volumetric basis with suitable size of measuring boxes and conventional concrete mixer with hopper is used to produce concrete and lift is used to lift the concrete to top. The reason being if pump or crane is considered the labour component gets drastically reduced but investment on machinery will be prohibitive for general contractors. For the proposed mix one should use 20 mm graded stone aggregate and 12 mm graded stone aggregate in proportion of 3:1 i.e. 3 parts 20 mm aggregate and 1 part 12 mm aggregate, however, the decision of structural consultant / Engineer-in-Charge would prevail for the usage of stone aggregates. In calculation, we have however, adopted 3 parts 20 mm and 1 part 12 mm aggregate.

5.20	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and skirting courses, fillets, columns, pillars, piers, abutments, posts and struts etc. upto floor five level excluding cost of centring, shuttering, finishing and reinforcement-				
5.2.1	In walls (any thickness), including attached pilasters, buttresses, piers, abutments etc.				
5.2.1.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08
04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.750	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.750	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 8,312.09
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	2.25%		₹ 187.02
					₹ 8,499.11

	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	2%		₹ 169.98
					₹ 8,669.09
	Add for Sundries and contingencies	@	3%		₹ 260.07
					₹ 8,929.16
	Add for water charges	@	1%		₹ 89.29
					₹ 9,018.45
	Add for contractor's profit and overheads	@	15%		₹ 1,352.77
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,371.22
	Rate per cum.	Say			₹ 10,371.20

5.2.1.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.750	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.750	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,928.69
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	2.75%		₹ 190.54
					₹ 7,119.23
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	2.25%		₹ 160.18
					₹ 7,279.41
	Add for Sundries and contingencies	@	3%		₹ 218.38
					₹ 7,497.79
	Add for water charges	@	1%		₹ 74.98
					₹ 7,572.77
	Add for contractor's profit and overheads	@	15%		₹ 1,135.92
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,708.69
	Rate per cum.	Say			₹ 8,708.70

5.2.1.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				

Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.750	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.750	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,686.69
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.25%		₹ 217.32
					₹ 6,904.01
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	2.50%		₹ 172.60
					₹ 7,076.61
	Add for Sundries and contingencies	@	3%		₹ 212.30
					₹ 7,288.91
	Add for water charges	@	1%		₹ 72.89
					₹ 7,361.80
	Add for contractor's profit and overheads	@	15%		₹ 1,104.27
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,466.07
	Rate per cum.	Say			₹ 8,466.10

5.2.1.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50

	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.750	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.750	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,767.37
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.25%		₹ 187.44
					₹ 5,954.81
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	2.50%		₹ 148.87
					₹ 6,103.68
	Add for Sundries and contingencies	@	3%		₹ 183.11
					₹ 6,286.79
	Add for water charges	@	1%		₹ 62.87
					₹ 6,349.66
	Add for contractor's profit and overheads	@	15%		₹ 952.45
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,302.11
	Rate per cum.	Say			₹ 7,302.10

5.20	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and skirting courses, fillets, columns, pillars, piers, abutments, posts and struts etc. upto floor five level excluding cost of centring, shuttering, finishing and reinforcement-				
5.2.2	In plinth and skirting courses, fillets, columns, pillars, posts and struts				
5.2.2.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08
04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67

	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.850	₹ 300.00	₹ 255.00
0212	Coolie (F)	Day	0.850	₹ 300.00	₹ 255.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 8,380.59
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	2.75%		₹ 230.47
					₹ 8,611.06
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	1.75%		₹ 150.69
					₹ 8,761.75
	Add for Sundries and contingencies	@	3%		₹ 262.85
					₹ 9,024.60
	Add for water charges	@	1%		₹ 90.25
					₹ 9,114.85
	Add for contractor's profit and overheads	@	15%		₹ 1,367.23
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,482.08
	Rate per cum.	Say			₹ 10,482.10

5.2.2.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.850	₹ 300.00	₹ 255.00
0212	Coolie (F)	Day	0.850	₹ 300.00	₹ 255.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,997.19
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.50%		₹ 244.90
					₹ 7,242.09

	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	3.50%		₹ 253.47
					₹ 7,495.56
	Add for Sundries and contingencies	@	3%		₹ 224.87
					₹ 7,720.43
	Add for water charges	@	1%		₹ 77.20
					₹ 7,797.63
	Add for contractor's profit and overheads	@	15%		₹ 1,169.64
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,967.27
	Rate per cum.	Say			₹ 8,967.30

5.2.2.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.750	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.750	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,686.69
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.75%		₹ 250.75
					₹ 6,937.44
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	3.60%		₹ 249.75
					₹ 7,187.19
	Add for Sundries and contingencies	@	3%		₹ 215.62
					₹ 7,402.81
	Add for water charges	@	1%		₹ 74.03
					₹ 7,476.84
	Add for contractor's profit and overheads	@	15%		₹ 1,121.53
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,598.37
	Rate per cum.	Say			₹ 8,598.40

5.2.2.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.150	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.750	₹ 300.00	₹ 225.00
0212	Coolie (F)	Day	0.750	₹ 300.00	₹ 225.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,767.37
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.75%		₹ 216.28
					₹ 5,983.65
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	3.60%		₹ 215.41
					₹ 6,199.06
	Add for Sundries and contingencies	@	3%		₹ 185.97
					₹ 6,385.03
	Add for water charges	@	1%		₹ 63.85
					₹ 6,448.88
	Add for contractor's profit and overheads	@	15%		₹ 967.33
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,416.21
	Rate per cum.	Say			₹ 7,416.20

5.30	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement-				
5.3.1	RCC work in suspended floors, roofs having slope upto 15° landings, balconies, shelves and chajjas.				
5.3.1.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08
04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50

03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.250	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	0.850	₹ 300.00	₹ 255.00
0212	Coolie (F)	Day	0.850	₹ 300.00	₹ 255.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
					₹ 8,434.59
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	2.20%		₹ 185.56
					₹ 8,620.15
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	1.0%		₹ 86.20
					₹ 8,706.35
	Add for Sundries and contingencies	@	3%		₹ 261.19
					₹ 8,967.54
	Add for water charges	@	1%		₹ 89.68
					₹ 9,057.22
	Add for contractor's profit and overheads	@	15%		₹ 1,358.58
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,415.80
	Rate per cum.	Say			₹ 10,415.80

5.3.1.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.250	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	0.850	₹ 300.00	₹ 255.00
0212	Coolie (F)	Day	0.850	₹ 300.00	₹ 255.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
					₹ 7,051.19

	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	2.80%		₹ 197.43
					₹ 7,248.62
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	1.95%		₹ 141.35
					₹ 7,389.97
	Add for Sundries and contingencies	@	3%		₹ 221.70
					₹ 7,611.67
	Add for water charges	@	1%		₹ 76.12
					₹ 7,687.79
	Add for contractor's profit and overheads	@	15%		₹ 1,153.17
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,840.96
	Rate per cum.	Say			₹ 8,841.00

5.3.1.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.250	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	0.850	₹ 300.00	₹ 255.00
0212	Coolie (F)	Day	0.850	₹ 300.00	₹ 255.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
					₹ 6,809.19
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.00%		₹ 204.28
					₹ 7,013.47
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	2.00%		₹ 140.27
					₹ 7,153.74
	Add for Sundries and contingencies	@	3%		₹ 214.61
					₹ 7,368.35
	Add for water charges	@	1%		₹ 73.68
					₹ 7,442.03
	Add for contractor's profit and overheads	@	15%		₹ 1,116.30

	Cost of providing and laying 1 cum. of cement concrete				₹ 8,558.33
	Rate per cum.	Say			₹ 8,558.30

5.3.1.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.250	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	0.850	₹ 300.00	₹ 255.00
0212	Coolie (F)	Day	0.850	₹ 300.00	₹ 255.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
					₹ 5,889.87
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.00%		₹ 176.70
					₹ 6,066.57
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	2.00%		₹ 121.33
					₹ 6,187.90
	Add for Sundries and contingencies	@	3%		₹ 185.64
					₹ 6,373.54
	Add for water charges	@	1%		₹ 63.74
					₹ 6,437.28
	Add for contractor's profit and overheads	@	15%		₹ 965.59
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,402.87
	Rate per cum.	Say			₹ 7,402.90

5.30	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement-				
5.3.2	RCC work in beams, lintels, bands, plain window sills, staircases and spiral staircases excluding precast spiral staircase.				
5.3.2.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				

04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08
04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.140	₹ 400.00	₹ 56.00
0203	Beldar (M)	Day	0.800	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.800	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 8,346.59
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	2.50%		₹ 208.66
					₹ 8,555.25
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	1.25%		₹ 106.94
					₹ 8,662.19
	Add for Sundries and contingencies	@	3%		₹ 259.87
					₹ 8,922.06
	Add for water charges	@	1%		₹ 89.22
					₹ 9,011.28
	Add for contractor's profit and overheads	@	15%		₹ 1,351.69
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,362.97
	Rate per cum.	Say			₹ 10,363.00

5.3.2.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.140	₹ 400.00	₹ 56.00
0203	Beldar (M)	Day	0.800	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.800	₹ 300.00	₹ 240.00

0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,963.19
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.25%		₹ 226.30
					₹ 7,189.49
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	2.40%		₹ 172.55
					₹ 7,362.04
	Add for Sundries and contingencies	@	3.00%		₹ 220.86
					₹ 7,582.90
	Add for water charges	@	1%		₹ 75.83
					₹ 7,658.73
	Add for contractor's profit and overheads	@	15%		₹ 1,148.81
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,807.54
	Rate per cum.	Say			₹ 8,807.50

5.3.2.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.140	₹ 400.00	₹ 56.00
0203	Beldar (M)	Day	0.800	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.800	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,721.19
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.50%		₹ 235.24
					₹ 6,956.43
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	2.50%		₹ 173.91
					₹ 7,130.34
	Add for Sundries and contingencies	@	3%		₹ 213.91
					₹ 7,344.25
	Add for water charges	@	1%		₹ 73.44
					₹ 7,417.69

	Add for contractor's profit and overheads	@	15%		₹ 1,112.65
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,530.34
	Rate per cum.	Say			₹ 8,530.30

5.3.2.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.140	₹ 400.00	₹ 56.00
0203	Beldar (M)	Day	0.800	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.800	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,801.87
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.50%		₹ 203.07
					₹ 6,004.94
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking exposed surfaces for finishings	@	2.50%		₹ 150.12
					₹ 6,155.06
	Add for Sundries and contingencies	@	3%		₹ 184.65
					₹ 6,339.71
	Add for water charges	@	1%		₹ 63.40
					₹ 6,403.11
	Add for contractor's profit and overheads	@	15%		₹ 960.47
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,363.58
	Rate per cum.	Say			₹ 7,363.60

5.40	Providing and laying upto floor five level reinforced cement concrete work in kerbs, steps and the like excluding the cost of centring, shuttering, finishing and reinforcement-				
5.4.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08

04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.140	₹ 400.00	₹ 56.00
0203	Beldar (M)	Day	0.800	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.800	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 8,346.59
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.00%		₹ 250.40
					₹ 8,596.99
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	1.0%		₹ 85.97
					₹ 8,682.96
	Add for Sundries and contingencies	@	3%		₹ 260.49
					₹ 8,943.45
	Add for water charges	@	1%		₹ 89.43
					₹ 9,032.88
	Add for contractor's profit and overheads	@	15%		₹ 1,354.93
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,387.81
	Rate per cum.	Say			₹ 10,387.80

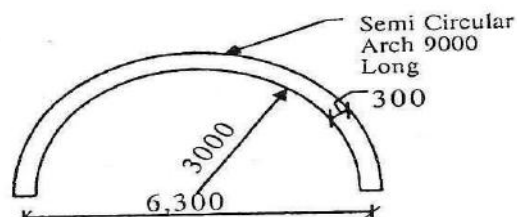
5.4.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.140	₹ 400.00	₹ 56.00
0203	Beldar (M)	Day	0.800	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.800	₹ 300.00	₹ 240.00

0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,963.19
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.50%		₹ 243.71
					₹ 7,206.90
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	1.95%		₹ 140.53
					₹ 7,347.43
	Add for Sundries and contingencies	@	3%		₹ 220.42
					₹ 7,567.85
	Add for water charges	@	1%		₹ 75.68
					₹ 7,643.53
	Add for contractor's profit and overheads	@	15%		₹ 1,146.53
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,790.06
	Rate per cum.	Say			₹ 8,790.10

5.4.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.140	₹ 400.00	₹ 56.00
0203	Beldar (M)	Day	0.800	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.800	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 6,721.19
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	4.00%		₹ 268.85
					₹ 6,990.04
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	2.00%		₹ 139.80
					₹ 7,129.84
	Add for Sundries and contingencies	@	3%		₹ 213.90
					₹ 7,343.74
	Add for water charges	@	1%		₹ 73.44
					₹ 7,417.18

	Add for contractor's profit and overheads	@	15%		₹ 1,112.58
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,529.76
	Rate per cum.	Say			₹ 8,529.80

5.4.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75
0218*	Mason	Day	0.140	₹ 400.00	₹ 56.00
0203	Beldar (M)	Day	0.800	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.800	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 5,801.87
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	4.00%		₹ 232.07
					₹ 6,033.94
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	2.00%		₹ 120.68
					₹ 6,154.62
	Add for Sundries and contingencies	@	3%		₹ 184.64
					₹ 6,339.26
	Add for water charges	@	1%		₹ 63.39
					₹ 6,402.65
	Add for contractor's profit and overheads	@	15%		₹ 960.40
	Cost of providing and laying 1 cum. of cement concrete				₹ 7,363.05
	Rate per cum.	Say			₹ 7,363.10

5.50	Providing and laying upto floor five level reinforced cement concrete work in arches, arch ribs excluding the cost of centring, shuttering, finishing and reinforcement-
	

	A semicircular arch of dimensions shown in the Fig is to be casted. Qty. of concrete involved = $22/7 \times 6.3 \times 2 \times 9.00 \times 0.30 = 26.72 \text{ cum}$				
5.5.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.675	₹ 3,969.00	₹ 2,679.08
04007	Stone aggregate 12mm	cum	0.225	₹ 4,005.00	₹ 901.13
02003	Fine sand	cum	0.45	₹ 370.00	₹ 166.50
03001	Cement	tonne	0.61	₹ 6,100.00	₹ 3,721.00
	CARRIAGE				
0405	Stone aggregate	cum	0.9	₹ 159.75	₹ 143.78
0425	Fine sand	cum	0.45	₹ 142.63	₹ 64.18
0421	Cement	tonne	0.61	₹ 110.94	₹ 67.67
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.600	₹ 400.00	₹ 240.00
0203	Beldar (M)	Day	1.200	₹ 300.00	₹ 360.00
0212	Coolie (F)	Day	1.200	₹ 300.00	₹ 360.00
0205	Bhishti/Waterman	Day	0.175	₹ 300.00	₹ 52.50
					₹ 8,808.97
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	5.00%		₹ 440.45
					₹ 9,249.42
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered [as the concrete is to laid on a steep slope a normal concrete gang cannot lay more than 8 to 9 cum per shift of 8 hours, however the No. of labourers. supervision staff etc. will required as if nearly 20 to 25 cum of normal concrete is to be done. All this points have been considered to work out this item including double shift, expenses for labour welfare etc.]	@	4.0%		₹ 369.98
					₹ 9,619.40
	Add for Sundries and contingencies	@	3%		₹ 288.58
					₹ 9,907.98
	Add for water charges	@	1%		₹ 99.08
					₹ 10,007.06
	Add for contractor's profit and overheads	@	15%		₹ 1,501.06
	Cost of providing and laying 1 cum. of cement concrete				₹ 11,508.12
	Rate per cum.	Say			₹ 11,508.10

5.5.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				

04006	Stone aggregate 20mm	cum	0.6615	₹ 3,969.00	₹ 2,625.49
04007	Stone aggregate 12mm	cum	0.2205	₹ 4,005.00	₹ 883.10
02003	Fine sand	cum	0.441	₹ 370.00	₹ 163.17
03001	Cement	tonne	0.40	₹ 6,100.00	₹ 2,440.00
	CARRIAGE				
0405	Stone aggregate	cum	0.882	₹ 159.75	₹ 140.90
0425	Fine sand	cum	0.441	₹ 142.63	₹ 62.90
0421	Cement	tonne	0.40	₹ 110.94	₹ 44.38
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.600	₹ 400.00	₹ 240.00
0203	Beldar (M)	Day	1.200	₹ 300.00	₹ 360.00
0212	Coolie (F)	Day	1.200	₹ 300.00	₹ 360.00
0205	Bhishti/Waterman	Day	0.175	₹ 300.00	₹ 52.50
					₹ 7,425.57
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	5.50%		₹ 408.41
					₹ 7,833.98
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered [as the concrete is to laid on a steep slope a normal concrete gang cannot lay more than 8 to 9 cum per shift of 8 hours, however the No. of labourers. supervision staff etc. will required as if nearly 20 to 25 cum of normal concrete is to be done. All this points have been considered to work out this item including double shift, expenses for labour welfare etc.]	@	4.50%		₹ 352.53
					₹ 8,186.51
	Add for Sundries and contingencies	@	3%		₹ 245.60
					₹ 8,432.11
	Add for water charges	@	1%		₹ 84.32
					₹ 8,516.43
	Add for contractor's profit and overheads	@	15%		₹ 1,277.46
	Cost of providing and laying 1 cum. of cement concrete				₹ 9,793.89
	Rate per cum.	Say			₹ 9,793.90

5.5.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.705	₹ 3,969.00	₹ 2,798.15
04007	Stone aggregate 12mm	cum	0.235	₹ 4,005.00	₹ 941.18
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17

0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.600	₹ 400.00	₹ 240.00
0203	Beldar (M)	Day	1.200	₹ 300.00	₹ 360.00
0212	Coolie (F)	Day	1.200	₹ 300.00	₹ 360.00
0205	Bhishti/Waterman	Day	0.175	₹ 300.00	₹ 52.50
					₹ 7,183.57
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	6.00%		₹ 431.01
					₹ 7,614.58
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered [as the concrete is to laid on a steep slope a normal concrete gang cannot lay more than 8 to 9 cum per shift of 8 hours, however the No. of labourers. supervision staff etc. will required as if nearly 20 to 25 cum of normal concrete is to be done. All this points have been considered to work out this item including double shift, expenses for labour welfare etc.]	@	5.00%		₹ 380.73
					₹ 7,995.31
	Add for Sundries and contingencies	@	3%		₹ 239.86
					₹ 8,235.17
	Add for water charges	@	1%		₹ 82.35
					₹ 8,317.52
	Add for contractor's profit and overheads	@	15%		₹ 1,247.63
	Cost of providing and laying 1 cum. of cement concrete				₹ 9,565.15
	Rate per cum.	Say			₹ 9,565.20

5.5.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.705	₹ 2,975.00	₹ 2,097.38
04003	Brick aggregate 12mm	cum	0.235	₹ 3,075.00	₹ 722.63
02003	Fine sand	cum	0.47	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.32	₹ 6,100.00	₹ 1,952.00
	CARRIAGE				
0405	Brick aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	0.47	₹ 142.63	₹ 67.04
0421	Cement	tonne	0.32	₹ 110.94	₹ 35.50
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.600	₹ 400.00	₹ 240.00

0203	Beldar (M)	Day	1.200	₹ 300.00	₹ 360.00
0212	Coolie (F)	Day	1.200	₹ 300.00	₹ 360.00
0205	Bhishti/Waterman	Day	0.175	₹ 300.00	₹ 52.50
					₹ 6,264.25
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	6.00%		₹ 375.86
					₹ 6,640.11
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered [as the concrete is to laid on a steep slope a normal concrete gang cannot lay more than 8 to 9 cum per shift of 8 hours, however the No. of labourers. supervision staff etc. will required as if nearly 20 to 25 cum of normal concrete is to be done. All this points have been considered to work out this item including double shift, expenses for labour welfare etc.]	@	5.00%		₹ 332.01
					₹ 6,972.12
	Add for Sundries and contingencies	@	3%		₹ 209.16
					₹ 7,181.28
	Add for water charges	@	1%		₹ 71.81
					₹ 7,253.09
	Add for contractor's profit and overheads	@	15%		₹ 1,087.96
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,341.05
	Rate per cum.	Say			₹ 8,341.10

5.60	Providing and laying upto floor five level reinforced cement concrete work in domes, vaults, shells, folded plate and roofs having slope more than 15° excluding the cost of centring, shuttering, finishing and reinforcement-				
5.6.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS [2% wastage of concrete is considered due to steep slope & thin section]				
04006	Stone aggregate 20mm	cum	0.6885	₹ 3,969.00	₹ 2,732.66
04007	Stone aggregate 12mm	cum	0.2295	₹ 4,005.00	₹ 919.15
02003	Fine sand	cum	0.459	₹ 370.00	₹ 169.83
03001	Cement	tonne	0.6222	₹ 6,100.00	₹ 3,795.42
	CARRIAGE				
0405	Stone aggregate	cum	0.92	₹ 159.75	₹ 146.65
0425	Fine sand	cum	0.459	₹ 142.63	₹ 65.47
0421	Cement	tonne	0.6222	₹ 110.94	₹ 69.03
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.750	₹ 400.00	₹ 300.00
0203	Beldar (M)	Day	2.250	₹ 300.00	₹ 675.00
0212	Coolie (F)	Day	2.250	₹ 300.00	₹ 675.00

0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 9,638.84
	Add cost of hire and running charges of mixer, water pump, lift etc.	@	3.00%		₹ 289.17
					₹ 9,928.01
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	2.25%		₹ 223.38
					₹ 10,151.39
	Add for Sundries and contingencies	@	3%		₹ 304.54
					₹ 10,455.93
	Add for water charges	@	1%		₹ 104.56
					₹ 10,560.49
	Add for contractor's profit and overheads	@	15%		₹ 1,584.07
	Cost of providing and laying 1 cum. of cement concrete				₹ 12,144.56
	Rate per cum.	Say			₹ 12,144.60

5.6.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS [2% wastage of concrete is considered due to steep slope & thin section]				
04006	Stone aggregate 20mm	cum	0.67473	₹ 3,969.00	₹ 2,678.00
04007	Stone aggregate 12mm	cum	0.22491	₹ 4,005.00	₹ 900.76
02003	Fine sand	cum	0.44982	₹ 370.00	₹ 166.43
03001	Cement	tonne	0.408	₹ 6,100.00	₹ 2,488.80
	CARRIAGE				
0405	Stone aggregate	cum	0.89964	₹ 159.75	₹ 143.72
0425	Fine sand	cum	0.44982	₹ 142.63	₹ 64.16
0421	Cement	tonne	0.408	₹ 110.94	₹ 45.26
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.750	₹ 400.00	₹ 300.00
0203	Beldar (M)	Day	2.250	₹ 300.00	₹ 675.00
0212	Coolie (F)	Day	2.250	₹ 300.00	₹ 675.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 8,227.76
	Add cost of hire and running charges of mixer, water pump, lift etc.	@	3.50%		₹ 287.97
					₹ 8,515.73
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	2.50%		₹ 212.89
					₹ 8,728.62
	Add for Sundries and contingencies	@	3%		₹ 261.86
					₹ 8,990.48
	Add for water charges	@	1%		₹ 89.90

					₹ 9,080.38
	Add for contractor's profit and overheads	@	15%		₹ 1,362.06
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,442.44
	Rate per cum.	Say			₹ 10,442.40

5.6.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS [2% wastage of concrete is considered due to steep slope & thin section]				
04006	Stone aggregate 20mm	cum	0.7191	₹ 3,969.00	₹ 2,854.11
04007	Stone aggregate 12mm	cum	0.2397	₹ 4,005.00	₹ 960.00
02003	Fine sand	cum	0.4794	₹ 370.00	₹ 177.38
03001	Cement	tonne	0.3264	₹ 6,100.00	₹ 1,991.04
	CARRIAGE				
0405	Stone aggregate	cum	0.9588	₹ 159.75	₹ 153.17
0425	Fine sand	cum	0.4794	₹ 142.63	₹ 68.38
0421	Cement	tonne	0.3264	₹ 110.94	₹ 36.21
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.750	₹ 400.00	₹ 300.00
0203	Beldar (M)	Day	2.250	₹ 300.00	₹ 675.00
0212	Coolie (F)	Day	2.250	₹ 300.00	₹ 675.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 7,980.92
	Add cost of hire and running charges of mixer, water pump, lift etc.	@	4.00%		₹ 319.24
					₹ 8,300.16
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	2.75%		₹ 228.25
					₹ 8,528.41
	Add for Sundries and contingencies	@	3%		₹ 255.85
					₹ 8,784.26
	Add for water charges	@	1%		₹ 87.84
					₹ 8,872.10
	Add for contractor's profit and overheads	@	15%		₹ 1,330.82
	Cost of providing and laying 1 cum. of cement concrete				₹ 10,202.92
	Rate per cum.	Say			₹ 10,202.90

5.6.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS [2% wastage of concrete is considered due to steep slope & thin section]				

04002	Brick aggregate 20mm	cum	0.7191	₹ 2,975.00	₹ 2,139.32
04003	Brick aggregate 12mm	cum	0.2397	₹ 3,075.00	₹ 737.08
02003	Fine sand	cum	0.4794	₹ 370.00	₹ 177.38
03001	Cement	tonne	0.3264	₹ 6,100.00	₹ 1,991.04
	CARRIAGE				
0405	Brick aggregate	cum	0.9588	₹ 159.75	₹ 153.17
0425	Fine sand	cum	0.4794	₹ 142.63	₹ 68.38
0421	Cement	tonne	0.3264	₹ 110.94	₹ 36.21
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.750	₹ 400.00	₹ 300.00
0203	Beldar (M)	Day	2.250	₹ 300.00	₹ 675.00
0212	Coolie (F)	Day	2.250	₹ 300.00	₹ 675.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 7,043.21
	Add cost of hire and running charges of mixer, water pump, lift etc.	@	4.00%		₹ 281.73
					₹ 7,324.94
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	2.75%		₹ 201.44
					₹ 7,526.38
	Add for Sundries and contingencies	@	3%		₹ 225.79
					₹ 7,752.17
	Add for water charges	@	1%		₹ 77.52
					₹ 7,829.69
	Add for contractor's profit and overheads	@	15%		₹ 1,174.45
	Cost of providing and laying 1 cum. of cement concrete				₹ 9,004.14
	Rate per cum.	Say			₹ 9,004.10

5.70	Providing and laying upto floor five level reinforced cement concrete work in chimneys, shafts excluding the cost of centring, shuttering, finishing and reinforcement-				
5.7.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS [2% wastage of concrete is considered due to reinforcement on both sides & thin section]				
04006	Stone aggregate 20mm	cum	0.6885	₹ 3,969.00	₹ 2,732.66
04007	Stone aggregate 12mm	cum	0.2295	₹ 4,005.00	₹ 919.15
02003	Fine sand	cum	0.459	₹ 370.00	₹ 169.83
03001	Cement	tonne	0.6222	₹ 6,100.00	₹ 3,795.42
	CARRIAGE				
0405	Stone aggregate	cum	0.92	₹ 159.75	₹ 146.65
0425	Fine sand	cum	0.459	₹ 142.63	₹ 65.47

0421	Cement	tonne	0.6222	₹ 110.94	₹ 69.03
	LABOUR:				
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0218*	Mason	Day	0.220	₹ 400.00	₹ 88.00
0203	Beldar (M)	Day	1.750	₹ 300.00	₹ 525.00
0212	Coolie (F)	Day	1.750	₹ 300.00	₹ 525.00
0205	Bhishti/Waterman	Day	0.120	₹ 300.00	₹ 36.00
					₹ 9,123.21
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	2.00%		₹ 182.46
					₹ 9,305.67
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	1.00%		₹ 93.06
					₹ 9,398.73
	Add for Sundries and contingencies	@	3%		₹ 281.96
					₹ 9,680.69
	Add for water charges	@	1%		₹ 96.81
					₹ 9,777.50
	Add for contractor's profit and overheads	@	15%		₹ 1,466.63
	Cost of providing and laying 1 cum. of cement concrete				₹ 11,244.13
	Rate per cum.	Say			₹ 11,244.10

5.7.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS [2% wastage of concrete is considered due to reinforcement on both sides & thin section & thin section]				
04006	Stone aggregate 20mm	cum	0.67473	₹ 3,969.00	₹ 2,678.00
04007	Stone aggregate 12mm	cum	0.22491	₹ 4,005.00	₹ 900.76
02003	Fine sand	cum	0.44982	₹ 370.00	₹ 166.43
03001	Cement	tonne	0.408	₹ 6,100.00	₹ 2,488.80
	CARRIAGE				
0405	Stone aggregate	cum	0.89964	₹ 159.75	₹ 143.72
0425	Fine sand	cum	0.44982	₹ 142.63	₹ 64.16
0421	Cement	tonne	0.408	₹ 110.94	₹ 45.26
	LABOUR:				
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0218*	Mason	Day	0.220	₹ 400.00	₹ 88.00
0203	Beldar (M)	Day	1.750	₹ 300.00	₹ 525.00
0212	Coolie (F)	Day	1.750	₹ 300.00	₹ 525.00
0205	Bhishti/Waterman	Day	0.120	₹ 300.00	₹ 36.00
					₹ 7,712.13
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	2.75%		₹ 212.08
					₹ 7,924.21

	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	1.50%		₹ 118.86
					₹ 8,043.07
	Add for Sundries and contingencies	@	3%		₹ 241.29
					₹ 8,284.36
	Add for water charges	@	1%		₹ 82.84
					₹ 8,367.20
	Add for contractor's profit and overheads	@	15%		₹ 1,255.08
	Cost of providing and laying 1 cum. of cement concrete				₹ 9,622.28
	Rate per cum.	Say			₹ 9,622.30

5.7.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS [2% wastage of concrete is considered due to reinforcement on both sides & thin section & thin section]				
04006	Stone aggregate 20mm	cum	0.7191	₹ 3,969.00	₹ 2,854.11
04007	Stone aggregate 12mm	cum	0.2397	₹ 4,005.00	₹ 960.00
02003	Fine sand	cum	0.4794	₹ 370.00	₹ 177.38
03001	Cement	tonne	0.3264	₹ 6,100.00	₹ 1,991.04
	CARRIAGE				
0405	Stone aggregate	cum	0.9588	₹ 159.75	₹ 153.17
0425	Fine sand	cum	0.4794	₹ 142.63	₹ 68.38
0421	Cement	tonne	0.3264	₹ 110.94	₹ 36.21
	LABOUR:				
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0218*	Mason	Day	0.220	₹ 400.00	₹ 88.00
0203	Beldar (M)	Day	1.750	₹ 300.00	₹ 525.00
0212	Coolie (F)	Day	1.750	₹ 300.00	₹ 525.00
0205	Bhishti/Waterman	Day	0.120	₹ 300.00	₹ 36.00
					₹ 7,465.29
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.00%		₹ 223.96
					₹ 7,689.25
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	3.00%		₹ 230.68
					₹ 7,919.93
	Add for Sundries and contingencies	@	3%		₹ 237.60
					₹ 8,157.53
	Add for water charges	@	1%		₹ 81.58
					₹ 8,239.11
	Add for contractor's profit and overheads	@	15%		₹ 1,235.87
	Cost of providing and laying 1 cum. of cement concrete				₹ 9,474.98

	Rate per cum.	Say			₹ 9,475.00

5.7.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS [2% wastage of concrete is considered due to reinforcement on both sides & thin section & thin section]				
04002	Brick aggregate 20mm	cum	0.7191	₹ 2,975.00	₹ 2,139.32
04003	Brick aggregate 12mm	cum	0.2397	₹ 3,075.00	₹ 737.08
02003	Fine sand	cum	0.4794	₹ 370.00	₹ 177.38
03001	Cement	tonne	0.3264	₹ 6,100.00	₹ 1,991.04
	CARRIAGE				
0405	Brick aggregate	cum	0.9588	₹ 159.75	₹ 153.17
0425	Fine sand	cum	0.4794	₹ 142.63	₹ 68.38
0421	Cement	tonne	0.3264	₹ 110.94	₹ 36.21
	LABOUR:				
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0218*	Mason	Day	0.220	₹ 400.00	₹ 88.00
0203	Beldar (M)	Day	1.750	₹ 300.00	₹ 525.00
0212	Coolie (F)	Day	1.750	₹ 300.00	₹ 525.00
0205	Bhishti/Waterman	Day	0.120	₹ 300.00	₹ 36.00
					₹ 6,527.58
	Add cost of hire and running charges of mixer, vibrator, water pump, lift etc.	@	3.00%		₹ 195.83
					₹ 6,723.41
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	3.00%		₹ 201.70
					₹ 6,925.11
	Add for Sundries and contingencies	@	3%		₹ 207.75
					₹ 7,132.86
	Add for water charges	@	1%		₹ 71.33
					₹ 7,204.19
	Add for contractor's profit and overheads	@	15%		₹ 1,080.63
	Cost of providing and laying 1 cum. of cement concrete				₹ 8,284.82
	Rate per cum.	Say			₹ 8,284.80

5.80	Providing and laying upto floor five level reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers facias and eaves boards excluding the cost of centring, shuttering, finishing and reinforcement-				
5.8.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				

Code	Discription	Unit	Quantity	Rate	Amount
	Qty. of concrete involved in horizontal and vertical fins as shown in Fig. Let us consider an example of fins consisting of 4 nos. verticals 4 m long and 50 mm thick at 1 m c/c and 2 nos. horizontals 50 mm thick all projecting/clear 600 mm from face of the wall. The qty. of concrete: Verticals: $4 \times 4.00 \times 0.60 \times 0.05 = 0.48$ cum Horizontals: $3 \times 2 \times 0.95 \times 0.60 \times 0.05 = 0.17$ cum Total = 0.65 cum Qty. of concrete available for single operation This item is generally seen in multistoreyed buildings. The work is of delicate nature and has to be cast in parts. One can neither do the form work of the whole frame at a time nor can we concrete the full 4 m height at a time without segregation of concrete. In this particular case the same would be cast in stages. 1st Stage: all verticals upto and including 1st horizontals 2nd stage: all verticals upto 150 mm below 2nd horizontals 3rd stage: all remaining portion. Qty. of concrete involved in stages: 1st stage: Verticals = $4 \times 1.00 \times 0.60 \times 0.05 = 0.12$, Horizontals = $3 \times 1 \times 0.95 \times 0.60 \times 0.05 = 0.086$ Total = 0.206 cum 2nd Stage: Verticals = $4 \times 1.75 \times 0.60 \times 0.05 = 0.210$ cum 3rd Stage: $0.65 - (0.206 + 0.21) = 0.234$ cum Thus, it can be seen that almost equal quantity of concrete would be laid in each lift. This is very small quantity to be laid each time consuming a small quantity of bag of cement. As no vibrator can be used being a very small section, concrete would be consolidated by rodding. Materials wastage: There will be a considerable wastage, but as the consolidation is not done by a mechanical vibrator no wastage need be considered.				
	Details of cost for 0.21 cum concrete				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.14175	₹ 3,969.00	₹ 562.61
04007	Stone aggregate 12mm	cum	0.04725	₹ 4,005.00	₹ 189.24
02003	Fine sand	cum	0.0945	₹ 370.00	₹ 34.97
03001	Cement	tonne	0.1281	₹ 6,100.00	₹ 781.41
	CARRIAGE				
0405	Stone aggregate	cum	0.19	₹ 159.75	₹ 30.19
0425	Fine sand	cum	0.0945	₹ 142.63	₹ 13.48
0421	Cement	tonne	0.1281	₹ 110.94	₹ 14.21
	LABOUR:				
0216	Foreman	Day	0.01	₹ 425.00	₹ 4.25
0218*	Mason	Day	0.010	₹ 400.00	₹ 4.00
0203	Beldar (M)	Day	0.325	₹ 300.00	₹ 97.50
0212	Coolie (F)	Day	0.325	₹ 300.00	₹ 97.50
0205	Bhishti/Waterman	Day	0.030	₹ 300.00	₹ 9.00
					₹ 1,838.36
	Add cost of hire and running charges of mixer, water pump, lift etc.	@	7.00%		₹ 128.69
					₹ 1,967.05
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	6.00%		₹ 118.02
					₹ 2,085.07
	Add for Sundries and contingencies	@	3%		₹ 62.55
					₹ 2,147.62
	Add for water charges	@	1%		₹ 21.48
					₹ 2,169.10
	Add for contractor's profit and overheads	@	15%		₹ 325.37
	Cost of providing and laying 0.21 cum. of cement concrete				₹ 2,494.47

	Rate per cum.				₹ 11,878.43
		Say			₹ 11,878.40

5.8.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.138915	₹ 3,969.00	₹ 551.35
04007	Stone aggregate 12mm	cum	0.046305	₹ 4,005.00	₹ 185.45
02003	Fine sand	cum	0.09261	₹ 370.00	₹ 34.27
03001	Cement	tonne	0.084	₹ 6,100.00	₹ 512.40
	CARRIAGE				
0405	Stone aggregate	cum	0.18522	₹ 159.75	₹ 29.59
0425	Fine sand	cum	0.09261	₹ 142.63	₹ 13.21
0421	Cement	tonne	0.084	₹ 110.94	₹ 9.32
	LABOUR:				
0216	Foreman	Day	0.01	₹ 425.00	₹ 4.25
0218*	Mason	Day	0.010	₹ 400.00	₹ 4.00
0203	Beldar (M)	Day	0.325	₹ 300.00	₹ 97.50
0212	Coolie (F)	Day	0.325	₹ 300.00	₹ 97.50
0205	Bhishti/Waterman	Day	0.030	₹ 300.00	₹ 9.00
					₹ 1,547.84
	Add cost of hire and running charges of mixer, water pump, lift etc.	@	8.00%		₹ 123.83
					₹ 1,671.67
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	7.00%		₹ 117.02
					₹ 1,788.69
	Add for Sundries and contingencies	@	3%		₹ 53.66
					₹ 1,842.35
	Add for water charges	@	1%		₹ 18.42
					₹ 1,860.77
	Add for contractor's profit and overheads	@	15%		₹ 279.12
	Cost of providing and laying 0.21 cum. of cement concrete				₹ 2,139.89
	Rate per cum.				₹ 10,189.95
		Say			₹ 10,190.00

5.8.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.14805	₹ 3,969.00	₹ 587.61
04007	Stone aggregate 12mm	cum	0.04935	₹ 4,005.00	₹ 197.65
02003	Fine sand	cum	0.0987	₹ 370.00	₹ 36.52
03001	Cement	tonne	0.0672	₹ 6,100.00	₹ 409.92

	CARRIAGE				
0405	Stone aggregate	cum	0.1974	₹ 159.75	₹ 31.53
0425	Fine sand	cum	0.0987	₹ 142.63	₹ 14.08
0421	Cement	tonne	0.0672	₹ 110.94	₹ 7.46
	LABOUR:				
0216	Foreman	Day	0.01	₹ 425.00	₹ 4.25
0218*	Mason	Day	0.010	₹ 400.00	₹ 4.00
0203	Beldar (M)	Day	0.325	₹ 300.00	₹ 97.50
0212	Coolie (F)	Day	0.325	₹ 300.00	₹ 97.50
0205	Bhishti/Waterman	Day	0.030	₹ 300.00	₹ 9.00
					₹ 1,497.02
	Add cost of hire and running charges of mixer, water pump, lift etc.	@	8.50%		₹ 127.25
					₹ 1,624.27
	Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	7.50%		₹ 121.82
					₹ 1,746.09
	Add for Sundries and contingencies	@	3%		₹ 52.38
					₹ 1,798.47
	Add for water charges	@	1%		₹ 17.98
					₹ 1,816.45
	Add for contractor's profit and overheads	@	15%		₹ 272.47
	Cost of providing and laying 0.21 cum. of cement concrete				₹ 2,088.92
	Rate per cum.				₹ 9,947.24
		Say			₹ 9,947.20

5.8.4	1:2:4 (1 Cement: 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04002	Brick aggregate 20mm	cum	0.14805	₹ 2,975.00	₹ 440.45
04003	Brick aggregate 12mm	cum	0.04935	₹ 3,075.00	₹ 151.75
02003	Fine sand	cum	0.0987	₹ 370.00	₹ 36.52
03001	Cement	tonne	0.0672	₹ 6,100.00	₹ 409.92
	CARRIAGE				
0405	Brick aggregate	cum	0.1974	₹ 159.75	₹ 31.53
0425	Fine sand	cum	0.0987	₹ 142.63	₹ 14.08
0421	Cement	tonne	0.0672	₹ 110.94	₹ 7.46
	LABOUR:				
0216	Foreman	Day	0.01	₹ 425.00	₹ 4.25
0218*	Mason	Day	0.010	₹ 400.00	₹ 4.00
0203	Beldar (M)	Day	0.325	₹ 300.00	₹ 97.50
0212	Coolie (F)	Day	0.325	₹ 300.00	₹ 97.50
0205	Bhishti/Waterman	Day	0.030	₹ 300.00	₹ 9.00
					₹ 1,303.96

Add cost of hire and running charges of mixer, water pump, lift etc.	@	8.50%	₹ 110.84
			₹ 1,414.80
Add for Testing cement, stone aggregate, sand, water, concrete cubes and scaffoldings, cost of cement slurry and hacking surfaces to be plastered	@	7.50%	₹ 106.11
			₹ 1,520.91
Add for Sundries and contingencies	@	3%	₹ 45.63
			₹ 1,566.54
Add for water charges	@	1%	₹ 15.67
			₹ 1,582.21
Add for contractor's profit and overheads	@	15%	₹ 237.33
Cost of providing and laying 0.21 cum. of cement concrete			₹ 1,819.54
Rate per cum.			₹ 8,664.48
	Say		₹ 8,664.50

FORM WORK [CENTERING AND SHUTTERING]

5.90	Centering shuttering including struttings, propping etc. and removal of form work for:
5.9.1.1	Foundations, footings, bases for columns etc. for mass concrete with timber plank
	Note: To execute the formwork of RCC footing the most suitable materials are Kail II timber planks 38 mm thick and mostly 100 mm Ø ballies. No. of footings = 5 Nos. Size of footing = 2.5x2.5x0.3 Contact area of footings = 5x4x2.5x0.3 = 15.00 sqm

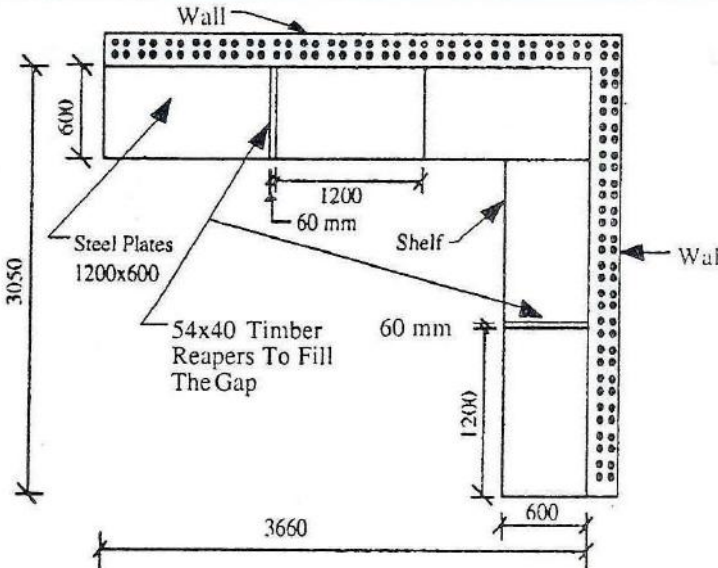
	For Labour inform work: (i) The labour component does not cover the profit of labour contractor, but the same is included in the item itself. (ii) The labour component includes labour required to bring materials from store (maximum 75.00 m) and return the same to the store on completion of work. (iii) Labour required for cleaning shutters after each operation and applying oil to the surface included in the item. (iv) Labour required for removing nails, joining ballies not included in the item. (v) Labour for erecting the scaffolding included in the item and not covered in labour components. (vi) For runners and battens, wastage is considered as nil.				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
	(A) Timber				
04014	(i) Kail II class planks 38 mm thick.Considering 150 mm width. $5 \times 2 \times 2.5 \times 0.15 \times 0.038 = 0.285 \text{ cum}$ $5 \times 2 \times 2.65 \times 0.15 \times 0.038 = 0.302 \text{ cum}$ Total = 0.587 cum Add 5% wastage = 0.029 cum Total = 0.616 cum (ii) Runners 75mmx50mm to fix at the ends of shorter sides to fix bolts in addition to joining 150 mm wide planks $5 \times 2 \times 0.30 \times 0.075 \times 0.05 = 0.0225 \text{ cum}$ (iii) Battens 50 mmx40mm to join the 150 mm wide planks: For long sides: $5 \times 2 \times 5 \times 0.30 \times 0.05 \times 0.04 = 0.03 \text{ cum}$ For short side: $5 \times 2 \times 3 \times 0.3 \times 0.05 \times 0.04 = 0.018 \text{ cum}$ Total = 0.048 cum (iv) 25 mm thick timber planks as back support = $5 \times 4 \times 4 \times 0.30 \times 0.15 \times 0.025 = 0.09 \text{ cum}$ Total qty. Timber = 0.7765 cum = 776.50 cudm	10 cumd	776.50	₹ 145.00	₹ 11,259.25
05017	(B) Bolts 12 mmØ 150 mm long $5 \times 4 \times 2 = 40 \text{ nos} = 0.1132 \text{ q}$	q	0.1132	₹ 6,749.00	₹ 763.99
0473	Carriage of timber	cum	0.777	₹ 80.65	₹ 62.62
					₹ 12,085.86
	Considering that these items can be used 20 times. Thus cost of using once=				₹ 604.29
	(C)Ballies 100 mm dia				
04010	We need ballies to hold column reinforcements in position and also to support the footing box from all 4 sides. (i) Ballies required to support the reinforcement: $5 \times 2 = 10 \text{ Nos.}$ 3.50 m to 4.00 m long (ii) As cross ballies on above ballies: $5 \times 2 \times 4 = 40 \text{ Nos.}$ 0.80m long i.e. 8 Nos. 4 m long (iii) For supports on all 4 sides in two rows: $5 \times 4 \times 4 \times 2 = 160 \text{ Nos.}$ of 0.50 m length = 80 m i.e. 20 Nos. 4 m long. Total No. of ballies = 38 or 149 m say 150 m	m	150.00	₹ 59.00	₹ 8,850.00
0473	Carriage of timber 1.18 cum	cum	1.180	₹ 80.65	₹ 95.17
					₹ 8,945.17
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 178.90

05001	(D) 12 mm dia steel pegs to fix the main ballies in proper position 5x4x5x0.45 = 45m @ 0.89 kg/m = 40.05 kg = 0.40 q	q	0.4	₹ 5,050.00	₹ 2,020.00
					₹ 2,020.00
	Considering that these items can be used 150 times. Thus cost of using once=				₹ 13.47
	Considering the salvage value as 25% Net cost =	75%	of	₹ 13.47	₹ 10.10
	The planks are to be joined and neat boxes will have to be manufactured.				
	LABOUR: For making boxes (5Nos.) i.e 15 sqm.				
0208*	Carpenter	Day	2.20	₹ 400.00	₹ 880.00
0212	Coolie	Day	2.20	₹ 300.00	₹ 660.00
					₹ 1,540.00
	Considering that the boxes can be used 20 times. Thus cost of using once=				₹ 77.00
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0208*	Carpenter	Day	2.50	₹ 400.00	₹ 1,000.00
0212	Helper/Coolie	Day	2.50	₹ 300.00	₹ 750.00
					₹ 2,726.54
	Add for Bolts, Nails, shuttering oil, cover bars and triangular cover blocks etc	@	5%		₹ 136.33
					₹ 2,862.87
	Add for Sundries and contingencies	@	3%		₹ 85.89
					₹ 2,948.76
	Add for contractor's profit and overheads	@	15%		₹ 442.31
	Cost of formwork for footing for 15 sqm. Area				₹ 3,391.07
	Cost of formwork per sqm				₹ 226.07
	Rate per sqm.	Say			₹ 226.10

5.9.1.2	Foundations, footings, bases for columns etc. for mass concrete with steel formwork				
	The above subject is dealt in detailed in Item 4.3.1 on Concrete Work. In this case there are steel reinforcements for footing and column and in turn the column reinforcements will be projecting even upto 4 to 5.5 m above ground. The above lengthy reinforcements of the column have to be supported at ground level above the footing pit, by 40 mm dis M.S. pipes				
05041	MS sheet 14 gauge required for main forms and small forms: 4x4x0.60x1.20 = 11.52 sqm 4x1x0.30x1.00 = 1.20 sqm Total = 12.72 sqm Add for wastage = 1.28 sqm Net total = 14.00 sqm Wt. of MS sheets 14 sqm @ 15.70kg/sqm = 14x15.70 = 2.20q	q	2.200	₹ 4,532.00	₹ 9,970.40

05056	40x40x6 mm Angle iron for backing: Vertical: 4x4x2x1.20 = 38.40m 4x1x2x1.00 = 8.00m Horizontals: 4x4x4x0.60 = 38.40m 4x1x4x0.30 = 4.80m Total = 89.60m @3.50kg/m =313.60kg Add for wastage = 17.90kg Net total = 331.50kg = 3.315 q	q	3.315	₹ 4,267.00	₹ 14,145.11
05056	40x40x6 mm Corner Angle: 4x1.20 = 4.80m Add for wastage = 0.20m Total = 5.00m @3.50kg/m =17.50kg=0.175 q	q	0.175	₹ 4,267.00	₹ 746.73
0468	Carriage of steel	tonne	0.569	₹ 110.94	₹ 63.12
MR	Cost of manufacturing [form panels/shuttering plates to cover 12.72 sqm]	q	5.30	₹ 850.00	₹ 4,505.00
					₹ 29,430.36
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 245.25
	Considering the salvage value as 25% Net cost =	75%	of	₹ 245.25	₹ 183.94
04018	MS Pipes 40 mm dia.=4x3x3.25 = 39.00m	m	39.00	₹ 328.00	₹ 12,792.00
04016	Double couplers [Needed to clamp the pipes at ends = 4x3=12 Nos.]	Nos.	12	₹ 119.00	₹ 1,428.00
04017	Single couplers [Needed to fix the shutters (form panels) with the pipes=4x2x3=24 Nos.]	Nos.	24	₹ 97.00	₹ 2,328.00
05043	6 mm bolts and nuts with washers : 30 mm long The shutters have to be bolted with each other. The bolt holes are generally provided at 150 mmc/c. Thus, bolts for each joint : 8 Nos. Total no. of bolts required =4x6x8=192Nos.	10 Nos.	192	₹ 27.00	₹ 518.40
0468	Carriage: Pipes = 39mx4.43 kg/m=172.77 kg 6mm = 6.30kg Total = 179.07kg=0.179tonnes	tonne	0.179	₹ 110.94	₹ 19.86
					₹ 17,086.26
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 85.43
	Considering the salvage value as 25% Net cost =	75%	of	₹ 85.43	₹ 64.07
	Timber planks and ballies:				
04014	a) 25 mm thick kail II planks for base: 4x2x3x3=72 Nos.=72x1x0.225x0.025 = 0.405 cum = 405 cudm	10 cudm	405.00	₹ 145.00	₹ 5,872.50
04010	b) 100mm Ø safeda ballies for support =4x3x3=36 Nos.=36x0.50=18.0m.	m	18.00	₹ 59.00	₹ 1,062.00
0473	Carriage planks and ballies	cum	0.545	₹ 80.65	₹ 43.95
					₹ 6,978.45
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 139.57

	Additional arrangement for keeping the column reinforcements in perfect vertical position. The size of footing is 2.70mx2.70m Adding minimum 0.60m working space on either side of footing the size of excavation would be 3.90mx3.90m. Hence, to cross the pit we will need a tube of say 5.50m length. Considering the column to be cast as 500mmx500mm we will need cross pipes 1 m long. It is enough if we have 6 cross pipes.				
04018	40 mm Pipes needed for 4 footings: 4x2x5.50 =44m 4x6x1.00=24m Total = 68m	m	68.00	₹ 328.00	₹ 22,304.00
04016	Couplings to fix the pipes 4x2x2x3 = 48Nos.	Nos.	48	₹ 119.00	₹ 5,712.00
0468	Carriage: Pipes = 68mx3.15 kg/m=214.20 kg Couplers: say 20 kg Total = 234.20kg=0.234tonnes	tonne	0.234	₹ 110.94	₹ 25.96
					₹ 28,041.96
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 140.21
	Considering the salvage value as 25% Net cost =	75%	of	₹ 140.21	₹ 105.16
05001	12 mm dia steel pegs to fix the main ballies in proper position 4x4x5x0.45 = 36m @ 0.89 kg/m = 32.04 kg = 0.32 q	q	0.32	₹ 5,050.00	₹ 1,616.00
					₹ 1,616.00
	Considering that these items can be used 150 times. Thus cost of using once=				₹ 10.77
	Considering the salvage value as 25% Net cost =	75%	of	₹ 10.77	₹ 8.08
	LABOUR: For fixing and releasing the pipes				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0208*	Carpenter	Day	1.90	₹ 400.00	₹ 760.00
0212	Helper/Coolie	Day	2.90	₹ 300.00	₹ 870.00
					₹ 2,215.82
	Add for shuttering oil, bolts, nails, cover bars and triangular cover blocks etc	@	8%		₹ 177.27
					₹ 2,393.09
	Add for Sundries and contingencies	@	3%		₹ 71.79
					₹ 2,464.88
	Add for contractor's profit and overheads	@	15%		₹ 369.73
	Cost of formwork for footing for 10.8 sqm. Area				₹ 2,834.61
	Cost of formwork per sqm				₹ 262.46
	Rate per sqm.	Say			₹ 262.50

5.9.2	R.C.C. Cast-in-situ Shelves
	
	R.C.C. shelf is generally about 600 mm wide projected from wall face and used for storing or keeping articles. This is a small member, the materials and the rates of suspended floor etc. cannot be applied for this. Hence the same is worked out in detail. Consider a shelf in the room of size 3.05 m x 3.66 m on two walls i.e. 1 No. 3.05 m and 1 No. 3.66 m long. Thickness can be just 100 mm. Contact area = $1 \times 3.05 \times 0.60 = 1.83 \text{ sqm}$ $1 \times 3.06 \times 0.60 = \underline{1.836 \text{ sqm}}$ 3.666 sqm This can be profitably done by steel plates and if plates are not available the same can be brought on hire basis. Hence, let us consider formwork for shelves with steel plates supported by timber and ballies
05041	MS sheet 14 gauge 1200x600: $5 \times 1.2 \times 0.60 = 3.60 \text{ sqm}$ Add for wastage @10% = 0.36 sqm Net total = 3.96 sqm say, 4.00 sqm Wt. of MS sheets 4 sqm @ 15.70 kg/sqm = 62.8 = 0.63q
05056	40x40x5 mm Angle iron: Vertical: $5 \times 2 \times 1.20 = 12.00 \text{ m}$ Horizontal: $5 \times 4 \times 0.60 = 12.00 \text{ m}$ Total = 24m @3.00kg/m = 72kg = 0.072q
0468	Carriage of steel
MR	Cost of manufacturing 5 plates
	Considering that these items can be used 120 times. Thus cost of using once=
	Considering the salvage value as 25% Net cost =

04014	Timber Supports: 75x50mm reapers to rest the form panels = $7 \times 0.60 \times 0.075 \times 0.05 = 0.0158 \text{ cum} = 15.8 \text{ cudm}$	10 cudm	15.80	₹ 145.00	₹ 229.10
04013	50x40mm Timber pieces to fill gaps. As these pieces will be needed to be replaced for each lift, being very delicate section, cost of scantlings per repetition $2 \times 0.60 \times 0.05 \times 0.04 = 0.0024 \text{ cum} = 2.4 \text{ cudm}$	10 cudm	2.40	₹ 137.00	₹ 32.88
0473	Carriage of timber	cum	0.016	₹ 80.65	₹ 1.27
					₹ 263.25
	Considering that these items can be used 25 times. Thus cost of using once=				₹ 10.53
04010	Ballies to support the shelves. Considering that the shelves are to be constructed 2500 mm above floor 100mm Ø safeda ballies for support =13 Nos. 2.5m long =32.5 m	m	32.50	₹ 59.00	₹ 1,917.50
0473	Carriage ballies	cum	0.255	₹ 80.65	₹ 20.57
					₹ 1,938.07
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 38.76
	LABOUR: For fixing and releasing the pipes				
0208*	Carpenter	Day	0.80	₹ 400.00	₹ 320.00
0212	Helper/Coolie	Day	0.80	₹ 300.00	₹ 240.00
					₹ 636.32
	Add for shuttering oil, bolts, nails, cover bars and triangular cover blocks etc	@	5%		₹ 31.82
					₹ 668.14
	Add for Sundries and contingencies	@	3%		₹ 20.04
					₹ 688.18
	Add for contractor's profit and overheads	@	15%		₹ 103.23
	Cost of formwork for footing for 3.666 sqm. Area with steel forms and timber backing				₹ 791.41
	Cost of formwork per sqm				₹ 215.88
	Rate per sqm.	Say			₹ 215.90

5.9.3	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc. using shuttering ply
	Wall with shuttering ply (Ref. Fig. Item No. 4.3.2). Accordingly for the 10 m long wall contact area is calculated by adopting the dimensions shown. Contact area: (per lift) Front and rear sides = $2 \times 10.0 \times 1.00 = 20 \text{ sqm}$ End closing = $2 \times 0.5(0.5+0.35) \times 1.0 = 0.85 \text{ sqm}$ Total contact area = 20.85 sqm Though we are using 1.20 m shutters as explained in Item No. 4.3.2 effective height of casting in subsequent lifts would be 1.00 m. Hence, an average height of 1.00 m is taken for calculation. To avoid segregation of concrete, shutters more than 1.20m high are not desirable.

Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
	(A) Timber for backing (size of shutter 1.00 m x1.20 m)				
04014	(i) Rafters 75 mm x 50 mm: Verticals: $10 \times 2 \times 1.20 \times 0.075 \times 0.05 = 0.18$ cum Horizontal: $10 \times 2 \times 4 \times 1.00 \times 0.075 \times 0.05 = 0.30$ cum Total = 0.48 cum Add for wastage = 0.02 cum Total = 0.50 cum (ii) Planks 38 mm thick 300 mm wide for closing ends = $2 \times 1.2 \times 0.5(0.65+0.60) \times 0.038 = 0.057$ cum Total qty. of timber = $0.50+0.057 = 0.557$ cum = 557 cudm	10 cumd	557.00	₹ 145.00	₹ 8,076.50
0473	Carriage of timber	cum	0.557	₹ 80.65	₹ 44.92
					₹ 8,121.42
	Considering that these items can be used 40 times. Thus cost of using once=				₹ 203.04
04014	(B)Rafters 75mmx50mm as wails to be fixed to embedded bolts $2 \times 3 \times 10.0 \times 0.075 \times 0.05 = 0.225$ cum = 225 cudm	10 cumd	225.00	₹ 145.00	₹ 3,262.50
0473	Carriage of timber	cum	0.225	₹ 80.65	₹ 18.15
					₹ 3,280.65
	Considering that these items can be used 40 times. Thus cost of using once=				₹ 82.02
05047	(C)Shuttering ply 9 mm thick $2 \times 10 \times 1.0 \times 1.20 = 24.00$ sqm Add 5% wastage = 1.20 sqm Total = 25.20 sqm	sqm	25.20	₹ 722.00	₹ 1,819.44
0473	Carriage of ply	cum	0.227	₹ 80.65	₹ 18.29
					₹ 1,837.73
	Considering that these items can be used 40 times. Thus cost of using once=				₹ 45.94
05026	40x6 mm M.S. Flats as spacers Considering spacing of spacers at 150 mm c/c = $67 \times 0.65 = 43.55$ m Weight of spacers = $43.55 @ 1.90$ kg/m = 82.75 kg = 0.83q.	q	0.83	₹ 3,992.00	₹ 3,313.36
05056	40x40x6 mm Angle iron: Vertical: $2 \times 21 \times 1.00 = 42.0$ m Horizontal: $2 \times 21 \times 1.00 = 42.0$ m Inclined supports $2 \times 21 \times 1.20 = 50.40$ m $2 \times 21 \times 0.60 = 25.20$ m Straight cross pieces $2 \times 2 \times 10.00 = 40.00$ m For angle below the shutters $2 \times 10 = 20$ m Verticals for railing $2 \times 21 \times 0.75 = 31.50$ m Total = 251.10m $@ 3.50 \text{ kg/m} = 878.85 \text{ kg} = 8.79 \text{ q}$	q	8.790	₹ 4,267.00	₹ 37,506.93
05039	16 mm Ø bars for hand railing $2 \times 2 \times 10.0 = 40.00$ m @ 1.58 kg/m = 63.20 kg = 0.63 q	q	0.630	₹ 4,010.00	₹ 2,526.30

0468	Carriage of steel	tonne	1.025	₹ 110.94	₹ 113.71
MR	Cost of fabrication of 10.25 q brackets and spacers	q	10.25	₹ 850.00	₹ 8,712.50
					₹ 52,172.80
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 434.77
	Considering the salvage value as 25% Net cost =	75%	of	₹ 434.77	₹ 326.08
	Bolts for fixing the shutters				
05027	(i) 10 mm dia. 75 mm long bolts with nuts and washers to fix spacers 2x67.00 = 134 nos.	each	134	₹ 12.00	₹ 1,608.00
05027	(ii) 10 mm dia. 30 mm long bolts with nuts and washers to fix vertical angles for railing and cross angles 2x2x21 = 84 nos. 2x2x21 = 84 nos. Total = 168 Nos.	each	168	₹ 12.00	₹ 2,016.00
05027	(iii) 10 mm dia. 125 mm long bolts with nuts and washers to fix sides of shutters with each other 2x7x21 = 294 nos.	each	294	₹ 12.00	₹ 3,528.00
05027	(iv) 10 mm dia. 75 mm long bolts with nuts and washers to fix the shutters to bottom angle 2x21x3 = 126 nos.	each	126	₹ 12.00	₹ 1,512.00
05027	(v) 10 mm dia. 125 mm long bolts with nuts and washers to fix end closing planks 2x2x55 = 220 nos.	each	220	₹ 12.00	₹ 2,640.00
					₹ 11,304.00
	Considering that these items can be used 15 times. Thus cost of using once=				₹ 753.60
05057	12 mm dia. 0.75 long(ave) bolts with nuts and washers to be embedded in the wall per lift to fix walls	each	20	₹ 52.00	₹ 1,040.00
	LABOUR: For making boxes (20Nos.)				
0208*	Carpenter	Day	3.15	₹ 400.00	₹ 1,260.00
0212	Coolie	Day	3.15	₹ 300.00	₹ 945.00
					₹ 2,205.00
	Considering that the boxes can be used 40 times. Thus cost of using once=				₹ 55.13
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0208*	Carpenter	Day	3.75	₹ 400.00	₹ 1,500.00
0212	Helper/Coolie	Day	3.75	₹ 300.00	₹ 1,125.00
					₹ 5,343.31
	Add for Nails, shuttering oil, cover bars and cover blocks, scaffoldings, chalis ropes etc	@	8%		₹ 427.46
					₹ 5,770.77
	Add for Sundries and contingencies	@	3%		₹ 173.12
					₹ 5,943.89
	Add for contractor's profit and overheads	@	15%		₹ 891.58
	Cost of formwork for footing for 20.85 sqm. Area				₹ 6,835.47
	Cost of formwork per sqm				₹ 327.84

	Rate per sqm.	Say			₹ 327.80

5.9.4.1	Suspended floors, roofs, landings, balconies and access platform with timber planks				
	Total contact area = $1 \times 3.66 \times 3.05 = 11.163$ sqm				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
	(A) Timber				
04014	(i) Planks 38 mm thick 1.83 m long 150 mm wide No. of planks required to cover the roof of the room = $2 \times 20 = 40$ Nos i.e. $40 \times 1.83 \times 0.15 \times 0.038 = 0.417$ cum Add for wastage = 0.018 cum Total qty. = 0.435 cum = 435 cudm (i) Rafters 100 mm x 75 mm: $5 \times 3.05 \times 0.1 \times 0.075 = 0.114$ cum Add for wastage = 0.006 cum Total = 0.12 cum = 120 cudm Total qty. of Timber = 555 cudm	10 cumd	555.00	₹ 145.00	₹ 8,047.50
0473	Carriage of timber	cum	0.557	₹ 80.65	₹ 44.92
					₹ 8,092.42
	Considering that these items can be used 20 times. Thus cost of using once=				₹ 404.62
04010	Ballies to support 100mm Ø safeda ballies for support = 25 Nos. 3m long = 75 m = 0.589 cum 75mm Ø safeda ballies for bracings = Inside: $2 \times 5 = 10$ Nos 4m long = 40 m Outside $2 \times 5 = 10$ Nos 3m long = 30 m = Total = 70 m = 0.309 cum Net total = 145 m = 0.898 cum	m	145.00	₹ 59.00	₹ 8,555.00
0473	Carriage ballies	cum	0.898	₹ 80.65	₹ 72.42
					₹ 8,627.42
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 172.55
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0208*	Carpenter	Day	3.00	₹ 400.00	₹ 1,200.00
0212	Helper/Coolie	Day	4.50	₹ 300.00	₹ 1,350.00
					₹ 3,339.67
	Add for Nails, shuttering oil, cover bars and cover blocks, scaffoldings, chalis ropes etc	@	10%		₹ 333.97
					₹ 3,673.64
	Add for Sundries and contingencies	@	3%		₹ 110.21
					₹ 3,783.85
	Add for contractor's profit and overheads	@	15%		₹ 567.58
	Cost of formwork for footing for 11.163 sqm. Area				₹ 4,351.43
	Cost of formwork per sqm				₹ 389.81
	Rate per sqm.	Say			₹ 389.80

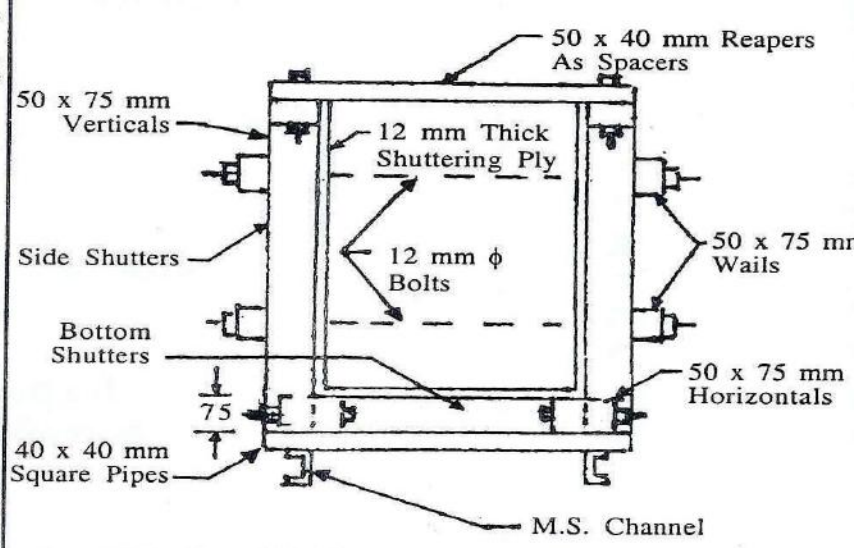
5.9.4.2	Suspended floors, roofs, landings, balconies and access platform with 12 mm thick shuttering ply				

	Total contact area = $1 \times 3.66 \times 3.05 = 11.163$ sqm				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
05065	Shuttering ply 12 mm thick $1 \times 3.66 \times 3.05 = 11.16$ sqm Add 5% wastage = 1.14 sqm Total = 12.30 sqm	sqm	12.30	₹ 702.00	₹ 863.46
04014	(i) Rafters 75 mm x 50 mm below ply: $6 \times 3.66 \times 0.05 \times 0.075 = 0.08235$ cum Add for wastage = 0.00365 cum Total = 0.086 cum = 86 cudm	10 cumd	86.00	₹ 145.00	₹ 1,247.00
0473	Carriage of timber	cum	0.234	₹ 80.65	₹ 18.84
					₹ 2,129.30
	Considering that these items can be used 20 times. Thus cost of using once=				₹ 106.47
05042	50x50 mm square pipes below the rafters $4 \times 3.00 = 12.0\text{m}$ @ 2.80kg/m = 33.6 kg	q	0.336	₹ 4,140.00	₹ 1,391.04
0468	Carriage	tonne	0.034	₹ 110.94	₹ 3.73
05003	Adjustable telescopic prop 3 m $3 \times 4 = 12$ Nos.	each	12	₹ 1,452.00	₹ 17,424.00
05052	Stirrup head $3 \times 4 = 12$ Nos.	each	12	₹ 495.00	₹ 5,940.00
					₹ 24,758.77
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 206.32
	Considering the salvage value as 25% Net cost =	75%	of	₹ 206.32	₹ 154.74
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0208*	Carpenter	Day	4.00	₹ 400.00	₹ 1,600.00
0212	Helper/Coolie	Day	6.00	₹ 300.00	₹ 1,800.00
					₹ 3,873.71
	Add for Nails, shuttering oil, cover bars and cover blocks, scaffoldings, ladders etc	@	10%		₹ 387.37
					₹ 4,261.08
	Add for Sundries and contingencies	@	3%		₹ 127.83
					₹ 4,388.91
	Add for contractor's profit and overheads	@	15%		₹ 658.34
	Cost of formwork for footing for 11.163 sqm. Area				₹ 5,047.25
	Cost of formwork per sqm				₹ 452.14
	Rate per sqm.	Say			₹ 452.10

5.9.4.3	Suspended floors, roofs, landings, balconies and access platform with M.S. plates and props				
	Total contact area = $1 \times 3.66 \times 3.05 = 11.163$ sqm				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				

05041	No. of forms: $5 \times 4 = 20$ Nos. Size of forms = $600\text{mm} \times 900\text{mm}$ (1) M.S. Sheet 14 gauge: $20 \times 0.6 \times 0.9 = 10.80\text{sqm}$ Add wastage = 1.20 sqm Total = 12.00 sqm @ $15.7\text{ kg/sqm} = 188.4\text{ kg} = 1.884\text{ q}$ Actually we are covering only 10.80 sqm by the floor forms. There will be a 5mm to 6mm gap on each side and this gap can be filled by timber battens of size $40\text{mm} \times 50\text{mm}$. The introduction of such battens in one rows will enable removing of the forms easily.	q	1.88	₹ 4,532.00	₹ 853.83
05056	40x40x5 mm Angle iron: Vertical: $20 \times 2 \times 0.9 = 36.0\text{m}$ Horizontals: $20 \times 4 \times 0.60 = 48.00\text{m}$ Total = 84m @ $3.00\text{kg/m} = 252\text{kg} = 2.52\text{q}$	q	2.520	₹ 4,267.00	₹ 10,752.84
0468	Carriage of steel	tonne	0.44	₹ 110.94	₹ 48.81
MR	Cost of manufacturing	q	4.40	₹ 850.00	₹ 3,740.00
					₹ 15,395.48
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 128.30
	Considering the salvage value as 25% Net cost =	75%	of	₹ 128.30	₹ 96.23
05056	M.S. Channel 75x40(Medium weight): $5 \times 3.00 = 15.00\text{m}$ @ $6.80\text{ kg/m} = 102\text{ kg} = 1.02\text{q}$	q	1.020	₹ 4,267.00	₹ 4,352.34
05003	Adjustable telescopic prop 3 m $3 \times 5 = 15\text{Nos.}$	each	15	₹ 1,452.00	₹ 21,780.00
05052	Stirrup head $3 \times 5 = 15\text{ Nos.}$	each	15	₹ 495.00	₹ 7,425.00
04018	40 mm bracing/spacer pipes $5 \times 3.0 = 15.0\text{m}$ @ $3.61\text{ kg/m} = 54.15\text{ kg} = 0.054\text{t}$	m	15	₹ 328.00	₹ 4,920.00
05023	Couplings to fix pipes to props $5 \times 3 = 15\text{ Nos.}$	each	15	₹ 73.00	₹ 1,095.00
0468	Carriage	tonne	0.2	₹ 110.94	₹ 22.19
					₹ 39,594.53
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 197.97
	Considering the salvage value as 25% Net cost =	75%	of	₹ 197.97	₹ 148.48
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0208*	Carpenter	Day	4.50	₹ 400.00	₹ 1,800.00
0212	Helper/Coolie	Day	5.75	₹ 300.00	₹ 1,725.00
					₹ 3,982.21
	Add for Timber pieces, shuttering oil, cover bars and cover blocks, scaffoldings, ladders etc	@	10%		₹ 398.22
					₹ 4,380.43
	Add for Sundries and contingencies	@	3%		₹ 131.41
					₹ 4,511.84
	Add for contractor's profit and overheads	@	15%		₹ 676.78

	Cost of formwork for footing for 11.163 sqm. Area				₹ 5,188.62
	Cost of formwork per sqm				₹ 464.81
	Rate per sqm.	Say			₹ 464.80

5.9.5.1	Lintels, beams, plinth beams, girders, bressumers and cantilevers with shuttering ply				
					
	Generally form work for a beam is done by shuttering ply 12 mm thick and supported by steel props. Sometimes on availability, the same is done by timber supported by ballies. Steel shuttering is used only for bottoms and for sides, again shutters manufactured out of ply is used. Consider a beam 300x400 mm and 5 m long with contact area = 5.74 sqm Bottom $1 \times 5.0 \times 0.3 = 1.50$ sqm Sides $2 \times 5.0 \times 0.40 = 4.00$ sqm Closing ends = $2 \times 0.3 \times 0.4 = 0.24$ sqm Total = 5.74 sqm Mainly, for quick fixing and releasing and also the durability of materials, shutters out of ply backed by timber scantlings are proposed. For both bottom and two sides 4 Nos. shutters of size 1250x300 mm for sides and 1250x500mm for bottom face are proposed.				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
05065	Shuttering ply 12 mm thick For bottom shutters $4 \times 1.25 \times 0.3 = 1.50$ sqm For side shutters $2 \times 4 \times 1.25 \times 0.5 = 5.00$ sqm For end closing shutters $2 \times 0.45 \times 0.50 = 0.45$ sqm Total = 6.95 sqm Add wastage = 0.35 sqm Total = 7.30 sqm	sqm	7.30	₹ 702.00	₹ 512.46

04014	Timber for backing: (a) For bottom shutters Long sides $4 \times 2 \times 1.25 \times 0.075 \times 0.05 = 0.0375 \text{ cum}$ Short sides $4 \times 4 \times 0.3 \times 0.075 \times 0.05 = 0.018 \text{ cum}$ (b) For side shutters Horizontal $2 \times 4 \times 2 \times 1.25 \times 0.075 \times 0.05 = 0.075 \text{ cum}$ Verticals $2 \times 4 \times 4 \times 0.5 \times 0.075 \times 0.05 = 0.06 \text{ cum}$ (c) For Wails $4 \times 5.00 \times 0.075 \times 0.05 = 0.075 \text{ cum}$ (d) For end closing shutters Verticals $2 \times 2 \times 0.5 \times 0.075 \times 0.05 = 0.0075 \text{ cum}$ Horizontal $2 \times 3 \times 0.45 \times 0.075 \times 0.05 = 0.01 \text{ cum}$ (e) For Top spacers $35 \times 0.45 \times 0.05 \times 0.04 = 0.0315 \text{ cum}$ Total = 0.3145 cum Add for wastage = 0.0157 cum Total = 0.3302 cum = 330 cumd	10 cumd	330.00	₹ 145.00	₹ 4,785.00
0473	Carriage of timber	cum	0.4178	₹ 80.65	₹ 33.70
					₹ 5,331.16
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 106.62
05042	40x40 mm square pipes to rest the beam bottom $8 \times 0.5 = 4.0 \text{ m} = 16.66 \text{ kg} = 0.017 \text{ t}$	q	0.167	₹ 4,140.00	₹ 689.72
05056	Channels 75mmx40mm (ISMC) $2 \times 0.5 = 10 \text{ m} = 68 \text{ kg} = 0.068 \text{ t}$	q	0.680	₹ 4,267.00	₹ 2,901.56
05003	Adjustable telescopic prop 3 m $2 \times 4 = 8 \text{ Nos.}$	each	8	₹ 1,452.00	₹ 11,616.00
05052	Stirrup head $2 \times 4 = 8 \text{ Nos.}$	each	8	₹ 495.00	₹ 3,960.00
04018	40 mm bracing/spacer pipes $2 \times 5 = 10.0 \text{ m} @ 3.61 \text{ kg/m} = 44.3 \text{ kg} = 0.0443 \text{ t}$	m	10	₹ 328.00	₹ 3,280.00
0468	Carriage	tonne	0.1325	₹ 110.94	₹ 14.70
					₹ 22,461.98
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 112.31
	Considering the salvage value as 25% Net cost =	75%	of	₹ 112.31	₹ 84.23

05017	Bolts & Nuts: (i) Bolts to fix vertical shutters with bottom (150 mm long and 12 mm dia) = $2 \times 4 \times 4 = 32$ Nos. Add wastage = 4 Nos. Total = 36 Nos. = 0.099q (ii) Bolts to fix square pipes to channels (75 mm long and 10 mm dia) $2 \times 8 = 16$ Nos Add for wastage = 3 Nos. Total = 19 Nos = 0.047q (iii) End closings (150mm long - 12 mm dia) = $2 \times 8 = 16$ Nos. Add wastage = 2 Nos. Total = 18 Nos. = 0.050q (iv) 125 mm long 10 mm dia bolts to fix top spacers = $2 \times 35 = 70$ Nos. Add for wastage = 5 Nos. Total = 0.091q (v) 125 mm long 10 mm dia bolts to fix the vertical shutters = $2 \times 3 \times 3 = 18$ Nos. Add for wastage = 3 Nos Total = 21 Nos. = 0.0256q	q	0.313	₹ 6,749.00	₹ 2,112.44
05023	Couplings to fix pipes to props $2 \times 4 = 8$ Nos.	each	8	₹ 73.00	₹ 584.00
0468	Carriage	tonne	0.0345	₹ 110.94	₹ 3.83
					₹ 25,358.79
	Considering that these items can be used 100 times. Thus cost of using once=				₹ 253.59
	Considering the salvage value as 25% Net cost =	75%	of	₹ 253.59	₹ 190.19
	LABOUR: For making boxes				
0208*	Carpenter	Day	0.80	₹ 400.00	₹ 320.00
0212	Coolie	Day	0.80	₹ 300.00	₹ 240.00
					₹ 560.00
	Considering that the boxes can be used 50 times. Thus cost of using once=				₹ 11.20
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0208*	Carpenter	Day	1.35	₹ 400.00	₹ 540.00
0212	Helper/Coolie	Day	1.35	₹ 300.00	₹ 405.00
					₹ 1,443.49
	Add for Nails, shuttering oil, cover bars and cover blocks, scaffoldings, ladders etc	@	10%		₹ 144.35
					₹ 1,587.84
	Add for Sundries and contingencies	@	3%		₹ 47.64
					₹ 1,635.48
	Add for contractor's profit and overheads	@	15%		₹ 245.32
	Cost of formwork for footing for 5.74 sqm. Area				₹ 1,880.80
	Cost of formwork per sqm				₹ 327.67
	Rate per sqm.	Say			₹ 327.70

5.9.5.2	Lintels, beams, plinth beams, girders, bressumers and cantilevers with wooden plank				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				

04014	Timber for backing: (i) 38 mm thick wooden planks 1.70 m long Bottoms $2 \times 3 \times 1.70 \times 0.15 \times 0.038 = 0.058$ cum Sides $2 \times 2 \times 3 \times 1.70 \times 0.15 \times 0.038 = 0.116$ cum $2 \times 1 \times 3 \times 1.70 \times 0.1 \times 0.38 = 0.039$ cum Closing ends $2 \times 3 \times 0.4 \times 0.15 \times 0.038 = 0.014$ cum Total = 0.227 cum Add for wastahge = 0.011 cum Total = 0.238 cum = 238 cudm (ii) 75x50mm reapers for making arrangement to fix bottoms with sides $2 \times 13 \times 0.6 \times 0.075 \times 0.05 = 0.059$ cum For brackets over ballies Horizontal $7 \times 1.0 \times 0.075 \times 0.05 = 0.026$ cum Inclined $2 \times 7 \times 0.6 \times 0.075 \times 0.05 = 0.032$ cum Total = .117 cum Add for wastahe = 0.005 cum Total = 122 cudm (iii) 50mmx40mm battens to join the planks For joining bottom = $12 \times 0.3 \times 0.05 \times 0.04 = 0.0072$ cum For joining sides = $2 \times 12 \times 0.45 \times 0.05 \times 0.04 = 0.0216$ cum As spacers at top = $35 \times 0.45 \times 0.05 \times 0.04 = 0.0315$ cum For joining closing ends = $2 \times 3 \times 0.45 \times 0.05 \times 0.04 = 0.0054$ cum Total = 0.0657 cum Add for wastage = 0.0033 cum Total = 0.069 cum = 69 cudm (iv) 75x50 mm rafters for walls $4 \times 5 \times 0.075 \times 0.05 = 0.075$ cum Add for wastage = 0.0038 cum Total = 0.0788 cum = 78.8 cudm	10 cudm	508.00	₹	145.00	₹	7,366.00
0473	Carriage of timber	cum	0.5080	₹	80.65	₹	40.97
						₹	7,406.97
	Considering that these items can be used 20 times. Thus cost of using once=					₹	370.35
04010	Ballies to support 100mm Ø safeda ballies for support =7 Nos. 3m long =21 m 75mm Ø safeda ballies for bracings =10 m i.e 4 Nos. 2.5m long =10 m Net total = 31 m = 0.21cum	m	31.00	₹	59.00	₹	1,829.00
0473	Carriage ballies	cum	0.210	₹	80.65	₹	16.94
						₹	1,845.94
	Considering that these items can be used 50 times. Thus cost of using once=					₹	36.92

05017	Bolts & Nuts: (i) 125 mm long and 12 mm dia to fix vertical shutters with bottom shutters = $2 \times 16 = 32$ Nos. Add wastage = 4 Nos. Total = 36 Nos. = 0.083q (ii) 125 mm long and 12 mm dia to fix end shutters = $2 \times 8 = 16$ Nos Add for wastage = 3 Nos. Total = 19 Nos = 0.044q (iii) 125mm long - 10 mm dia to fix top spacers = $2 \times 35 = 70$ Nos. Add wastage = 5 Nos. Total = 75 Nos. = 0.091q (iv) 125 mm long 10 mm dia bolts to fix vertical shutters = $2 \times 9 = 18$ Nos. Add for wastage = 3 Nos. Total = 21 Nos. = 0.0256q (v) 600 mm long 12 mm dia bolts to fix the walls = $4 \times 3 = 12$ Nos. = 0.07q	q	3.120	₹ 6,749.00	₹ 21,056.88
0468	Carriage	tonne	0.312	₹ 110.94	₹ 34.61
					₹ 21,091.49
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 175.76
	Considering the salvage value as 25% Net cost =	75%	of	₹ 175.76	₹ 131.82
	LABOUR: For making				
0208*	Carpenter	Day	0.30	₹ 400.00	₹ 120.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
					₹ 210.00
	Considering that the boxes can be used 20 times. Thus cost of using once=				₹ 10.50
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.75	₹ 400.00	₹ 300.00
0212	Helper/Coolie	Day	1.00	₹ 300.00	₹ 300.00
					₹ 1,192.09
	Add for Nails, shuttering oil, cover bars and cover blocks, scaffoldings, ladders etc	@	10%		₹ 119.21
					₹ 1,311.30
	Add for Sundries and contingencies	@	3%		₹ 39.34
					₹ 1,350.64
	Add for contractor's profit and overheads	@	15%		₹ 202.60
	Cost of formwork for footing for 5.74 sqm. Area				₹ 1,553.24
	Cost of formwork per sqm				₹ 270.60
	Rate per sqm.	Say			₹ 270.60

5.9.6.1	Columns, Pillars, Piers, Abutments, Posts and Struts with shuttering ply				
	Generally form work for a beam is done by (i) With shuttering ply 9 mm thick and timber backing (ii) With wooden planks and timber backing (iii) With MS shutters made of steel plates with angle backing Consider a column 300x300 mm and 3.5 m long As explained in item 4.3.3, we cannot lay full 3.50 m long column at a time, not even 2.50 m long column. We can at the most cast a length of about 2.00 m or less. Hence for calculating contact area one should take average contact area i.e. average of 1st lift and 2nd lift: 1st Lift: $1 \times 0.3 \times 4 \times 2.0 = 2.40 \text{ sqm}$ 2nd Lift: $1 \times 4 \times 0.3 \times 1.50 = 1.80 \text{ sqm}$ Total = 4.20 sqm Ave. Contact area = 2.10 sqm.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIALS				
05047	Shuttering ply 9 mm thick $2 \times 2.0 \times 0.3 = 1.20 \text{ sqm}$ $2 \times 2.0 \times 0.4 = 1.60 \text{ sqm}$ Total = 2.80 sqm add wastage = 0.20 sqm Total = 3.00 sqm	sqm	7.30	₹ 722.00	₹ 527.06
04014	(i) Timber for backing (75x50 mm reapers): Vertical : $2 \times 4 \times 2.0 \times 0.075 \times 0.05 = 0.06 \text{ cum}$ Horizontals: $4 \times 5 \times 0.3 \times 0.075 \times 0.05 = 0.0225 \text{ cum}$ Total = 0.0825 cum Add for wastage = 0.0025 cum Total = 0.085 cum = 85 cudm (ii) 90mmx60mm runners to fix bolts: $5 \times 4 \times 0.9 \times 0.9 \times 0.06 = 0.0972 \text{ cum}$ Add for wastage = 0.0028 cum Total = 0.40 cum = 100 cudm	10 cudm	185.00	₹ 145.00	₹ 2,682.50
0473	Carriage of timber	cum	0.2120	₹ 80.65	₹ 17.10
					₹ 3,226.66
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 64.53
05016	Bolts & Nuts: (i) 750 mm long and 16 mm dia double nuts = $4 \times 5 \times 0.75 = 15 \text{ m} = 15 \times 1.44 = 21.6 \text{ kg} = 0.216 \text{ q}$	q	0.216	₹ 6,595.00	₹ 1,424.52
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 7.12
	Considering the salvage value as 25% Net cost =	75%	of	₹ 7.12	₹ 5.34
04013	(i) Timber scantlings for Tee head shore and brackets For Tee head shore $4 \times 0.75 \times 0.075 \times 0.075 = 0.017 \text{ cum}$ Inclined members $4 \times 2 \times 0.5 \times 0.075 \times 0.05 = 0.015 \text{ cum}$ Brackets to rest the shutters $2 \times 0.75 \times 0.075 \times 0.05 = 0.006 \text{ cum}$ Total = 0.038 cum = 38 cudm	10 cudm	38.00	₹ 137.00	₹ 520.60
04010	100mm Ø Ballies are required to keep the column box in position i.e. in plumb and alignment etc. Again ballies are required for the 2nd lift operation End verticals for staging: $4 \times 1.80 = 7.20 \text{ m}$ Lower cross ballies: $4 \times 0.8 = 3.20 \text{ m}$ Top cross ballies: $4 \times 0.8 = 3.20 \text{ m}$ Horizontal = $8 \times 9.0 = 72 \text{ m}$ End inclined ballies = $4 \times 2 \times 2.50 = 20.0 \text{ m}$ For scaffoldings Vertical $4 \times 3.00 = 12.0 \text{ m}$ Horizontals $2 \times 8 \times 2.0 = 32.0 \text{ m}$ Total = 149.60m	m	149.60	₹ 59.00	₹ 8,826.40

0473	Carriage ballies	cum	1.213	₹ 80.65	₹ 97.83
					₹ 9,444.83
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 188.90
	LABOUR: For making				
0208*	Carpenter	Day	0.45	₹ 400.00	₹ 180.00
0212	Coolie	Day	0.35	₹ 300.00	₹ 105.00
					₹ 285.00
	Considering that the boxes can be used 50 times. Thus cost of using once=				₹ 5.70
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.55	₹ 400.00	₹ 220.00
0212	Helper/Coolie	Day	0.55	₹ 300.00	₹ 165.00
					₹ 691.97
	Add for Nails, shuttering oil, slotted cover blocks, scaffoldings etc	@	10%		₹ 69.20
					₹ 761.17
	Add for Sundries and contingencies	@	3%		₹ 22.84
					₹ 784.01
	Add for contractor's profit and overheads	@	15%		₹ 117.60
	Cost of formwork for 2.1 sqm. Area				₹ 901.61
	Cost of formwork per sqm				₹ 429.34
	Rate per sqm.	Say			₹ 429.30

5.9.6.2 Columns, Pillars, Piers, Abutments, Posts and Struts with wooden plank					
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
04014	(i) 12 mm thick wooden planks 2x2x2.0x0.15x0.012 = 0.0144 cum 2x2x2.0x0.175x0.012 = 0.0168 cum Total = 0.0312 cum Add for wastage = 0.0013 cum Total = 0.0325 cum = 32.50 cudm	10 cumd	32.50	₹ 145.00	₹ 471.25
04014	(i)Timber for backing (75x50 mm reapers): Vertical : 2x4x2.0x0.075x0.05 = 0.06 cum Horizontals: 4x5x0.3x0.075x0.05 = 0.0225 cum Total = 0.0825 cum Add for wastage = 0.0025 cum Total = 0.085 cum = 85 cudm (ii) 90mmx60mm runners to fix bolts: 5x4x0.9x0.9x0.06 = 0.0972 cum Add for wastage = 0.0028 cum Total =0.40 cum = 100 cudm	10 cumd	100.00	₹ 145.00	₹ 1,450.00
0473	Carriage of timber	cum	0.4325	₹ 80.65	₹ 34.88
					₹ 1,956.13
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 39.12
05016	Bolts & Nuts: (i)750 mm long and 16 mm dia double nuts = 4x5x0.75 = 15m = 15x1.44 = 21.6 kg =0.216q	q	0.216	₹ 6,595.00	₹ 1,424.52
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 7.12

	Considering the salvage value as 25% Net cost =	75%	of	₹ 7.12	₹ 5.34
04013	(i) Timber scantlings for Tee head shore and brackets For Tee head shore $4 \times 0.75 \times 0.075 \times 0.075 = 0.017 \text{ cum}$ Inclined members $4 \times 2 \times 0.5 \times 0.075 \times 0.05 = 0.015 \text{ cum}$ Brackets to rest the shutters $2 \times 0.75 \times 0.075 \times 0.05 = 0.006 \text{ cum}$ Total = 0.038 cum = 38 cumd	10 cumd	38.00	₹ 137.00	₹ 520.60
04010	100mm Ø Ballies are required to keep the column box in position i.e. in plumb and alignment etc. Again ballies are required for the 2nd lift operation End verticals for staging: $4 \times 1.80 = 7.20 \text{ m}$ Lower cross ballies: $4 \times 0.8 = 3.20 \text{ m}$ Top cross ballies: $4 \times 0.8 = 3.20 \text{ m}$ Horizontal = $8 \times 9.0 = 72 \text{ m}$ End inclined ballies = $4 \times 2 \times 2.50 = 20.0 \text{ m}$ For scaffoldings Vertical $4 \times 3.00 = 12.0 \text{ m}$ Horizontals $2 \times 8 \times 2.0 = 32.0 \text{ m}$ Total = 149.60m	m	149.60	₹ 59.00	₹ 8,826.40
0473	Carriage ballies	cum	1.213	₹ 80.65	₹ 97.83
					₹ 9,444.83
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 188.90
	LABOUR: For making				
0208*	Carpenter	Day	0.45	₹ 400.00	₹ 180.00
0212	Coolie	Day	0.35	₹ 300.00	₹ 105.00
					₹ 285.00
	Considering that the boxes can be used 50 times. Thus cost of using once=				₹ 5.70
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.55	₹ 400.00	₹ 220.00
0212	Helper/Coolie	Day	0.55	₹ 300.00	₹ 165.00
					₹ 666.56
	Add for Nails, shuttering oil, slotted cover blocks, scaffoldings etc	@	10%		₹ 66.66
					₹ 733.22
	Add for Sundries and contingencies	@	3%		₹ 22.00
					₹ 755.22
	Add for contractor's profit and overheads	@	15%		₹ 113.28
	Cost of formwork for 2.1 sqm. Area				₹ 868.50
	Cost of formwork per sqm				₹ 413.57
	Rate per sqm.	Say			₹ 413.60

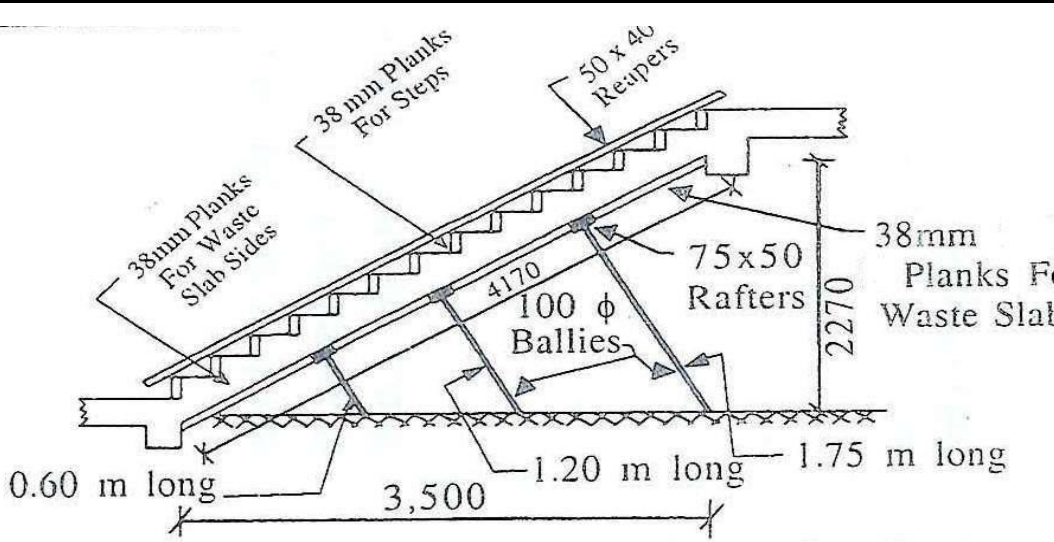
5.9.6.3	Columns, Pillars, Piers, Abutments, Posts and Struts with M.S. shutters				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
05041	(1) M.S.Sheet 14 gauge: $2 \times 0.3 \times 2.00 = 1.20 \text{ sqm}$ $2 \times 0.38 \times 2.0 = 1.52 \text{ sqm}$ Add wastage = 0.28 sqm Total = 3.0 sqm = 0.471 q	q	0.47	₹ 4,532.00	₹ 213.46

05056	40x40x6 mm Angle iron: Vertical: 2x4x2.0 =16.00m Horizontals: 2x6x0.3 =3.60m 2x6x0.4 = 4.80m Total = 24.40m Add for wastage = 1.60 m Total = 26.00 @3.50kg/m =91kg=0.91q	q	0.910	₹ 4,267.00	₹ 3,882.97
05056	Double channel light type 75x40 mm (Two channel are welded back to back keeping about 25 mm gap to enable the bolt fixing) 2x5x4x0.9 = 36m @ 5.70 kg/m = 205.20 kg = 2.052 q	q	2.052	₹ 4,267.00	₹ 8,755.88
05016	16 mm dia bolts 750 mm long threaded on both sides with double nuts and washers = 4x5 = 20 Nos @ 1.52 kg/No. = 30.4 kg = 0.304 q	q	0.304	₹ 6,595.00	₹ 2,004.88
05017	10 mm dia 40 mm long bolts and nuts to fix shutters with each other = 4x12 = 48 Nos Add wastage = 2 Nos. Total = 50 Nos = 0.415 q	q	0.415	₹ 6,749.00	₹ 2,800.84
0468	Carriage of steel	tonne	0.0415	₹ 110.94	₹ 4.60
MR	Cost of manufacturing	q	3.64	₹ 850.00	₹ 3,094.00
					₹ 20,756.63
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 172.97
	Considering the salvage value as 25% Net cost =	75%	of	₹ 172.97	₹ 129.73
04013	(i)Timber scantlings for Tee head shore and brackets For Tee head shore 4x0.75x0.075x0.075 = 0.017 cum Inclined members 4x2x0.5x0.075x0.05 = 0.015 cum Brackets to rest the shutters 2x0.75x0.075x0.05 = 0.006 cum Total = 0.038 cum = 38 cumd	10 cumd	38.00	₹ 137.00	₹ 520.60
04010	100mm Ø Ballies are required to keep the column box in position i.e. in plumb and alignment etc. Again ballies are required for the 2nd lift operation End verticals for staging: 4x1.80 = 7.20 m Lower cross ballies: 4x0.8 = 3.20m Top cross ballies: 4x0.8 = 3.20m Horizontal = 8x9.0= 72 m End inclined ballies = 4x2x2.50 = 20.0 m For scaffoldings Vertical 4x3.00 = 12.0m Horizontals 2x8x2.0 = 32.0 m Total = 149.60m	m	149.60	₹ 59.00	₹ 8,826.40
0473	Carriage ballies	cum	1.213	₹ 80.65	₹ 97.83
					₹ 9,444.83
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 188.90
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.50	₹ 400.00	₹ 200.00

0212	Helper/Coolie	Day	0.50	₹ 300.00	₹ 150.00
					₹ 711.13
	Add for Timber pieces, shuttering oil, cover bars and cover blocks, scaffoldings, ladders etc	@	10%		₹ 71.11
					₹ 782.24
	Add for Sundries and contingencies	@	3%		₹ 23.47
					₹ 805.71
	Add for contractor's profit and overheads	@	15%		₹ 120.86
	Cost of formwork for footing for 2.1 sqm. Area				₹ 926.57
	Cost of formwork per sqm				₹ 441.22
	Rate per sqm.	Say			₹ 441.20

5.9.6.4 Circular Columns with ply shutters					
Code	Discription	Unit	Quantity	Rate	Amount
	Form-work with ply and timber backing for round column of size 382 mm dia. And 3.50 m long giving a contact area 2.10 sqm				
	MATERIALS				
05047	Shuttering ply 9 mm thick 2x7x0.191x2.00 = 2.40 sqm Add wastage = 0.20sqm Total = 2.60 sqm	sqm	7.30	₹ 722.00	₹ 527.06
04014	(i) 38 mm thick planks for curvature and straight portions (a) For curved portions = 2x5x0.60x0.30x0.038 = 0.0684 cum (b) Straight pieces = 2x2x2.0x0.1x0.038 = 0.0304 cum (ii) 50mmx50mm battens fixed vertically in thr column shutter 4x2.0x0.05x0.05 = 0.02 cum Total = 0.1188 cum = 118.80cudm	10 cumd	185.00	₹ 145.00	₹ 2,682.50
0473	Carriage of timber	cum	0.1422	₹ 80.65	₹ 11.47
					₹ 3,221.03
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 64.42
05016	Bolts & Nuts: (i)750 mm long and 16 mm dia double nuts = 25 nos = 0.10q	q	0.100	₹ 6,595.00	₹ 659.50
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 3.30
	Considering the salvage value as 25% Net cost =	75%	of	₹ 7.12	₹ 5.34
04013	Timber scantlings for Tee head shore =0.032 cum = 32 cudm	10 cumd	32.00	₹ 137.00	₹ 438.40
04010	100mm Ø Ballies =139.60 m	m	139.60	₹ 59.00	₹ 8,236.40
0473	Carriage ballies	cum	0.0326	₹ 80.65	₹ 2.63
					₹ 8,677.43
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 173.55
05056	40x40x6 mm Angle iron for circular steel bracket (7x0.382)+0.3 = 1.50m @ 3.50 kg/m = 5.25 kg = 0.0525q	q	0.0525	₹ 4,267.00	₹ 224.02

0468	Carriage of steel	tonne	0.0415	₹ 110.94	₹ 4.60
MR	Cost of manufacturing	q	0.0525	₹ 850.00	₹ 44.63
					₹ 273.25
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 1.37
	Considering the salvage value as 25% Net cost =	75%	of	₹ 1.37	₹ 1.03
	LABOUR: For making boxes				
0208*	Carpenter	Day	0.45	₹ 400.00	₹ 180.00
0212	Coolie	Day	0.25	₹ 300.00	₹ 75.00
					₹ 255.00
	Considering that the boxes can be used 50 times. Thus cost of using once=				₹ 5.10
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.50	₹ 400.00	₹ 200.00
0212	Helper/Coolie	Day	1.00	₹ 300.00	₹ 300.00
					₹ 791.94
	Add for Timber pieces, shuttering oil, cover bars and cover blocks, scaffoldings, ladders etc	@	10%		₹ 79.19
					₹ 871.13
	Add for Sundries and contingencies	@	3%		₹ 26.13
					₹ 897.26
	Add for contractor's profit and overheads	@	15%		₹ 134.59
	Cost of formwork ffor 2.1 sqm. Area				₹ 1,031.85
	Cost of formwork per sqm				₹ 491.36
	Rate per sqm.	Say			₹ 491.40

5.9.7.1 Stairs (excluding landings) except spiral-staircases with wooden plank					
					
Code	Discription	Unit	Quantity	Rate	Amount
	Contact area Waist slab = $1 \times 4.17 \times 1.30 = 5.421$ sqm Waist slab sides $2 \times 4.17 \times 0.15 = 1.251$ sqm Step sides $14 \times 2 \times \frac{1}{2} \times 0.25 \times 0.15 = 0.525$ sqm Step face = $14 \times 1.30 \times 0.15 = 2.73$ sqm Total = 9.927 sqm				
	MATERIALS				

04014	(i) 38 mm thick wooden planks: Waist slab bottom = $18 \times 2.15 \times 0.15 \times 0.038 = 0.221$ cum Waist slab sides = $2 \times 2 \times 2.15 \times 0.15 \times 0.038 = 0.049$ cum Sloping planks (cut pieces from this plank can be used on other side) $2 \times 1 \times 2.15 \times 0.15 \times 0.038 = 0.0245$ cum For steps proper = $14 \times 1.37 \times 0.15 \times 0.038 = 0.109$ cum Total = 0.4035 cum = 403.50 cumd (ii) 50mmx40mm Reapers (to join planks) = $4 \times 1.3 \times 0.05 \times 0.04 = 0.010$ cum To join top sides = $3 \times 4.5 \times 0.05 \times 0.04 = 0.027$ cum To join waist sides = $2 \times 2 \times 14 \times 0.15 \times 0.05 \times 0.04 = 0.0168$ cum Total = 0.0538 cum = 53.8 cumd (iii) 75mmx50mm Rafters to fix the ballies = $3 \times 1.30 \times 0.075 \times 0.05 = 0.0146$ cum = 14.6 cumd	10 cumd	471.90	₹ 145.00	₹ 6,842.55
04010	100mm Ø Ballies $3 \times 1.75 = 5.25$ m $3 \times 1.20 = 3.60$ m $3 \times 0.60 = 1.80$ m Total = 10.65 m	m	10.65	₹ 59.00	₹ 628.35
0473	Carriage of timber	cum	0.5555	₹ 80.65	₹ 44.80
					₹ 7,515.70
	Considering that these items can be used 25 times. Thus cost of using once=				₹ 300.63
	LABOUR: For making				
0208*	Carpenter	Day	1.20	₹ 400.00	₹ 480.00
0212	Coolie	Day	1.20	₹ 300.00	₹ 360.00
					₹ 840.00
	Considering that the boxes can be used 25 times. Thus cost of using once=				₹ 33.60
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0208*	Carpenter	Day	3.50	₹ 400.00	₹ 1,400.00
0212	Helper/Coolie	Day	3.50	₹ 300.00	₹ 1,050.00
					₹ 2,890.48
	Add for Nails, shuttering oil, cover blocks, scaffoldings etc	@	15%		₹ 433.57
					₹ 3,324.05
	Add for Sundries and contingencies	@	3%		₹ 99.72
					₹ 3,423.77
	Add for contractor's profit and overheads	@	15%		₹ 513.57
	Cost of formwork for 9.927 sqm. Area				₹ 3,937.34
	Cost of formwork per sqm				₹ 396.63
	Rate per sqm.	Say			₹ 396.60

5.9.7.2	Spiral staircases (including landing) - cast-in-situ with ply				
Code	Discription	Unit	Quantity	Rate	Amount

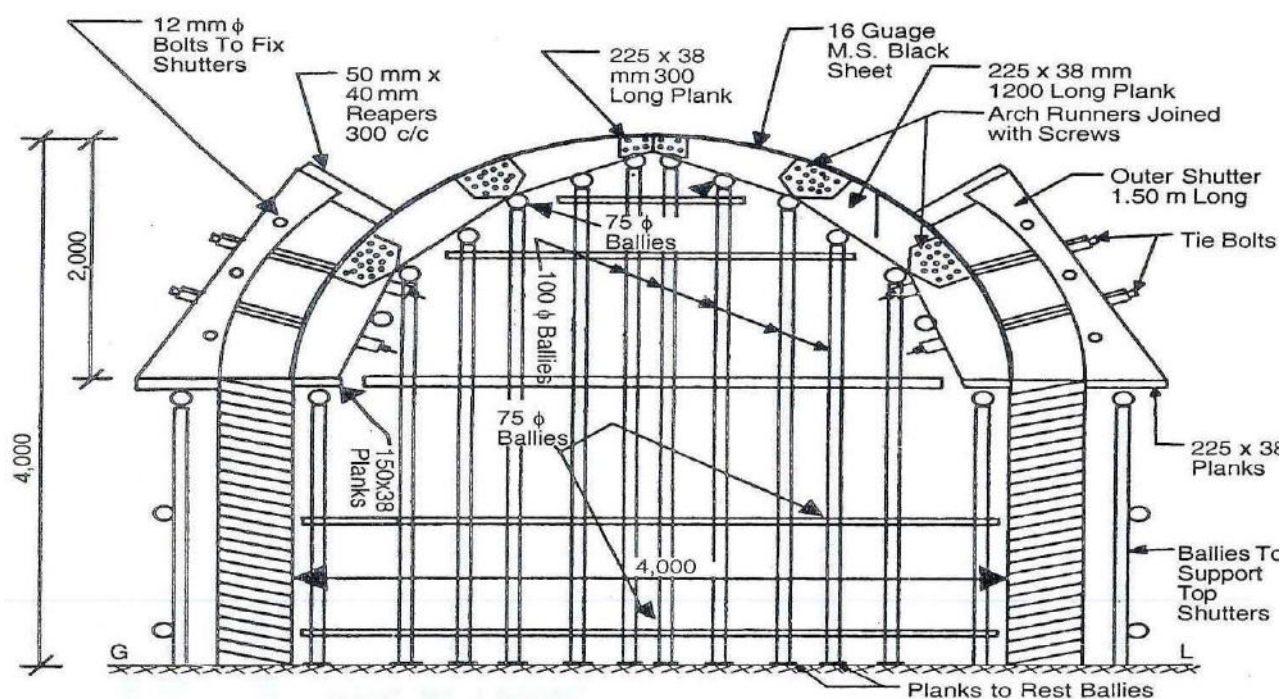
	Open Spiral Stair cases (Cast-in-situ) Contact area Waist slab = $1 \times 6.00 \times 1.20 = 7.20 \text{ sqm}$ Step sides(out side) $15 \times 0.5236 \times \frac{1}{2}(0.30+0.15) = 1.77 \text{ sqm}$ Step sides(inside) $15 \times 0.105 \times \frac{1}{2}(0.30+0.15) = 0.354 \text{ sqm}$ Step face = $16 \times 1.20 \times 0.15 = 2.88 \text{ sqm}$ Landing base = $1 \times 1.20 \times 2.25 = 2.70 \text{ sqm}$ Landing edges $2 \times 2.25 \times 0.15 = 0.675 \text{ sqm}$ & $1 \times 1.20 \times 0.15 = 0.18 \text{ sqm}$ Total = $15.759 \text{ sqm} \approx 15.76 \text{ sqm}$				

	MATERIALS				
05047	Shuttering ply 9 mm thick (considering the length of wast slab approx. 6 m) (i) Waist slab curved in shape = $1 \times 6.0 \times 1.50 = 9.0$ sqm (ii) For out side boxes = $1 \times 15 \times 0.5236 \times \frac{1}{2}(0.30+0.15) = 1.77$ sqm (iii) For inside boxes = $1 \times 15 \times 0.105 \times \frac{1}{2}(0.30+0.15) = 0.35$ sqm (iv) For landing slab = $1 \times 1.25 \times 2.30 = 2.875$ sqm Total = 13.995 sqm Add wastage = 1.005sqm Total = 15.00 sqm	sqm	15.00	₹ 722.00	₹ 1,083.00
04014	Timber: (i) 150mmx100mm runners (for curved shape runners on both sides of wasit slab) Outside: $1 \times 9.75 \times 0.15 \times 0.10 = 0.146$ cum Inside: $1 \times 3.05 \times 0.15 \times 0.10 = 0.045$ cum Total = 0.191 cum Add for wastage = 0.009 cum Total = 0.20 cum = 200 cudm (ii) 100x75 runners (below landing slab) $2 \times 2.30 \times 0.10 \times 0.075 = 0.0345$ cum = 34.5 cudm (iii) 75 mmx 50 mm reapers (for waist slab) $20 \times 1.50 \times 0.075 \times 0.05 = 0.1125$ cum (below landing slab) $8 \times 1.30 \times 0.075 \times 0.05 = 0.039$ cum Add for wastage = 0.0085 cum Total = 0.160 cum = 160 cudm (iv) 150mmx30mm planks: For 15 Nos. outside boxes: $2 \times 15 \times 0.55 \times 0.15 \times 0.03 = 0.07425$ cum $1 \times 15 \times 0.30 \times 0.15 \times 0.03 = 0.02025$ cum $1 \times 15 \times 0.105 \times 0.15 \times 0.03 = 0.00709$ cum For inside boxes $2 \times 15 \times 0.105 \times 0.15 \times 0.03 = 0.01418$ cum $1 \times 15 \times 0.30 \times 0.15 \times 0.03 = 0.0202$ cum $1 \times 15 \times 0.15 \times 0.15 \times 0.03 = 0.00709$ cum Total = 0.146 cum Add for wastage = 0.009 cum Total = 0.155 cum = 155 cudm (v) 150x38mm planks For faces of steps: $15 \times 1.50 \times 0.15 \times 0.038 = 0.1368$ cum For landing slab: $2 \times 2.3 \times 0.15 \times 0.038 = 0.02622$ cum $1 \times 1.30 \times 0.15 \times 0.038 = 0.0074$ cum Total = 0.1704 cum=170 cudm (iv) 50x40mm battens (to keep the step facing planks in position) $2 \times 6.0 \times 0.05 \times 0.04 = 0.024$ cum = 24 cudm	10 cumd	743.50	₹ 145.00	₹ 10,780.75
0473	Carriage of timber	cum	0.7435	₹ 80.65	₹ 59.96
					₹ 11,923.71
	Considering that these items can be used 4 times. Thus cost of using once=				₹ 2,980.93

04010	100mm Ø Ballies-3.00m long (to support the staircase) Inner face: 1x2.4 = 2.40 m 1x2.05 = 2.05 m 1x1.70 = 1.70 m 1x1.30 = 1.30m 1x0.95 = 0.95 m 1x0.60 = 0.60 m Outer face: 1x2.40 = 2.40m 1x2.20 = 2.20m 1x2.05 = 2.05m 1x1.85 = 1.85m 1x1.70 = 1.70m 1x1.50 = 1.50m 1x1.30 = 1.30m 1x1.15 = 1.15m 1x0.95 = 0.95m 1x0.80 = 0.80m 1x0.60 = 0.60m For landing slab 2x3x2.40 = 14.40m Total = 39.90 m Add for wastage = 2.10m ~~Total = 42.00m~~ 75mm Ø Ballies- 3.15m long (for bracing) For landing slab: 2x2.5 = 5.00 m 2x1.5 = 3.00 m For waist slab 4x3.00 = 12.00 m 2x2.00 = 4.00m Total = 24.00 m Add for wastage = 1m Total = 25.00m	m	67.00	₹ 59.00	₹ 3,953.00
0473	Carriage of timber	cum	0.4400	₹ 80.65	₹ 35.49
					₹ 3,988.49
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 79.77
	LABOUR: For making				
0208*	Carpenter	Day	1.00	₹ 400.00	₹ 400.00
0212	Coolie	Day	0.75	₹ 300.00	₹ 225.00
					₹ 625.00
	Considering that the boxes can be used 4 times. Thus cost of using once=				₹ 156.25
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0208*	Carpenter	Day	1.50	₹ 400.00	₹ 600.00
0212	Helper/Coolie	Day	2.00	₹ 300.00	₹ 600.00
					₹ 4,523.20
	Add for Nails, shuttering oil, cover blocks, scaffoldings etc	@	10%		₹ 452.32
					₹ 4,975.52
	Add for Sundries and contingencies	@	3%		₹ 149.27
					₹ 5,124.79
	Add for contractor's profit and overheads	@	15%		₹ 768.72
	Cost of formwork for 15.76 sqm. Area				₹ 5,893.51

Cost of formwork per sqm				₹	373.95
Rate per sqm.	Say			₹	374.00

5.9.8 Arches upto 6 m span

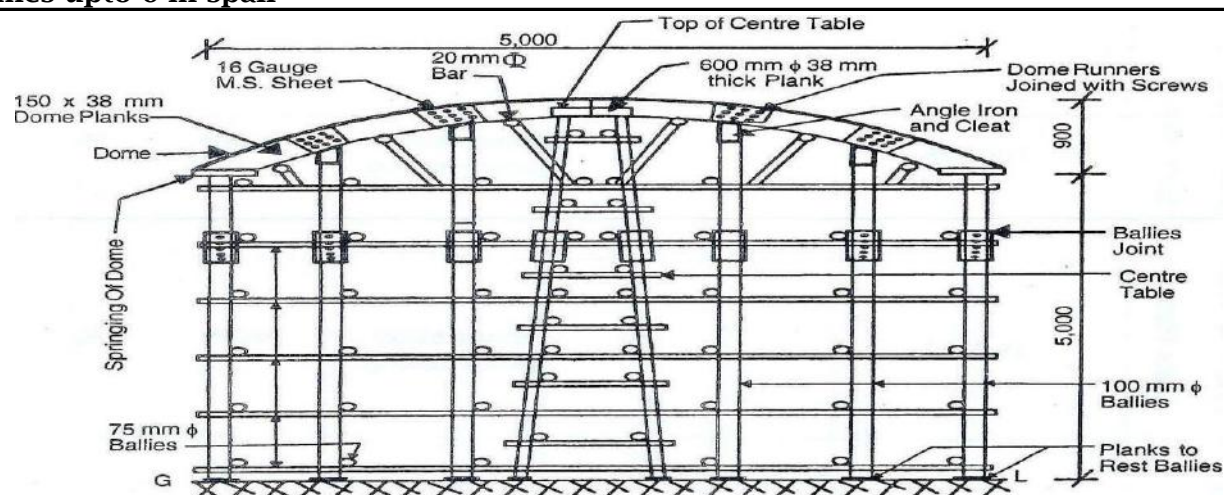


Code	Description	Unit	Quantity	Rate	Amount
	Contact area: Arch bottom $\frac{1}{2} \times \pi \times 4.0 \times 4.0 = 25.13$ sqm Outer shutter = $2 \times 4.0 \times 1.55 = 12.40$ sqm Total = 37.53 sqm				
	MATERIALS				
05041	(A) MS sheet 16 gauge For arch proper: $\frac{1}{2} \times \pi \times 4.0 \times 4.0 = 25.13$ sqm For outer shutters: $2 \times 6 \times 0.6 \times 1.55 = 11.16$ sqm $2 \times 1 \times 0.4 \times 1.55 = 1.24$ sqm Total = 37.53 sqm Add 15% for overlap = 5.62 sqm Total = 43.15 sqm Add for wastage 1.85 sqm Total 45.00 sqm = 564.75 kg = 5.65q	q	5.65	₹ 4,532.00	₹ 2,560.58
0468	Carriage of sheets	tonnes	0.5650	₹ 110.94	₹ 62.68
					₹ 2,623.26
	Considering that these items can be used 60 times. Thus cost of using once=				₹ 43.72
	Considering the salvage value as 25% Net cost =	75%	of	₹ 43.72	₹ 32.79

04014	Timber: (i) 38 mm thick planks [For arch proper (14 rows)] $14 \times 6 \times 1.20 \times 0.225 \times 0.038 = 0.8618 \text{ cum}$ Centre plank: $14 \times 1 \times 0.225 \times 0.225 \times 0.038 = 0.0269 \text{ cum}$ At springing inside: $2 \times 4.0 \times 0.15 \times 0.038 = 0.0456 \text{ cum}$ Outside: $2 \times 4.0 \times 0.225 \times 0.038 = 0.0684 \text{ cum}$ For outer shutters: Vertical: $2 \times 7 \times 2 \times 1.50 \times 0.225 \times 0.038 = 0.3591 \text{ cum}$ Horizontals: $2 \times 6 \times 6 \times 0.60 \times 0.10 \times 0.038 = 0.1641 \text{ cum}$ Small shutters: $2 \times 1 \times 6 \times 0.40 \times 0.10 \times 0.038 = 0.0182 \text{ cum}$ Closing ends: $2 \times 4 \times 1.50 \times 0.15 \times 0.038 = 0.0684 \text{ cum}$ Total = 1.6125 cum Add for wastage = 0.0875 cum Total = 1.70 cum = 1700 cumd (ii) 50mmx40mm repers: [To fix bolts (tie rods)] $2 \times 4 \times 2 \times 2.00 \times 0.05 \times 0.04 = 0.064 \text{ cum}$ On top of outer shutters: $2 \times 14 \times 0.45 \times 0.05 \times 0.04 = 0.0252 \text{ cum}$ To fix closing ends: $2 \times 6 \times 0.60 \times 0.05 \times 0.04 = 0.0144 \text{ cum}$ Total = 0.1036 cum Add for wastage = 0.0044 cum Total = 0.108 cum = 108 cumd	10 cumd	1808.00	₹	145.00	₹	26,216.00
0473	Carriage of timber	cum	1.8080	₹	80.65	₹	145.82
						₹	26,361.82
	Considering that these items can be used 10 times. Thus cost of using once=					₹	2,636.18
05016	Bolts & Nuts: (i) 750 mm long and 12 mm dia double nuts = 55 nos = 0.5q (ii) 175 mm long and 12 mm dia double nuts = 75 nos = 0.25q	q	0.750	₹	6,595.00	₹	4,946.25
	Considering that these items can be used 80 times. Thus cost of using once=					₹	61.83
	Considering the salvage value as 25% Net cost =	75%	of	₹	61.83	₹	46.37

04010	100mm Ø Ballies-(at springing on both sides) 2x2x6x2.0 = 48.0m At crown: 2x6x4.00 = 48.00m Rows near crown: 2x2x6x3.50 = 84.00m Near springing: 2x6x2.75 = 33.00 m 2x6x3.00 = 36.00 m Total = 249.00 m Add wastage = 11.00 m Total = 260.00m 75mm Ø Ballies-(Over vertical supports) 14x4.0 = 56.0m Below curved planks 6x4.00 = 24.00 m For bracing (outside) 4x4.00 = 16.00 m Inside bracings: 3x6x4.00 = 72.0m 1x6x3.0 = 18.0m 1x6x1.50 = 9.00 m Total = 195.0m Add for wastage = 5.00m Total = 200.00m	m	460.00	₹	59.00	₹	27,140.00
0473	Carriage of timber	cum	2.9840	₹	80.65	₹	240.66
						₹	27,380.66
	Considering that these items can be used 50 times. Thus cost of using once=					₹	547.61
	LABOUR: For making						
0208*	Carpenter	Day	6.50	₹	400.00	₹	2,600.00
0212	Coolie	Day	6.50	₹	300.00	₹	1,950.00
						₹	4,550.00
	LABOUR: For fixing and releasing form work						
0216	Foreman	Day	3.00	₹	425.00	₹	1,275.00
0208*	Carpenter	Day	10.00	₹	400.00	₹	4,000.00
0212	Helper/Coolie	Day	10.00	₹	300.00	₹	3,000.00
						₹	16,087.95
	Add for Nails, shuttering oil, curved cover blocks, scaffoldings, safety & security etc	@	18%			₹	2,895.83
						₹	18,983.78
	Add for Sundries and contingencies	@	3%			₹	569.51
						₹	19,553.29
	Add for contractor's profit and overheads	@	15%			₹	2,932.99
	Cost of formwork for 37.53 sqm. Area					₹	22,486.28
	Cost of formwork per sqm					₹	599.15
	Rate per sqm.	Say				₹	599.20

5.9.9 Domes upto 6 m span

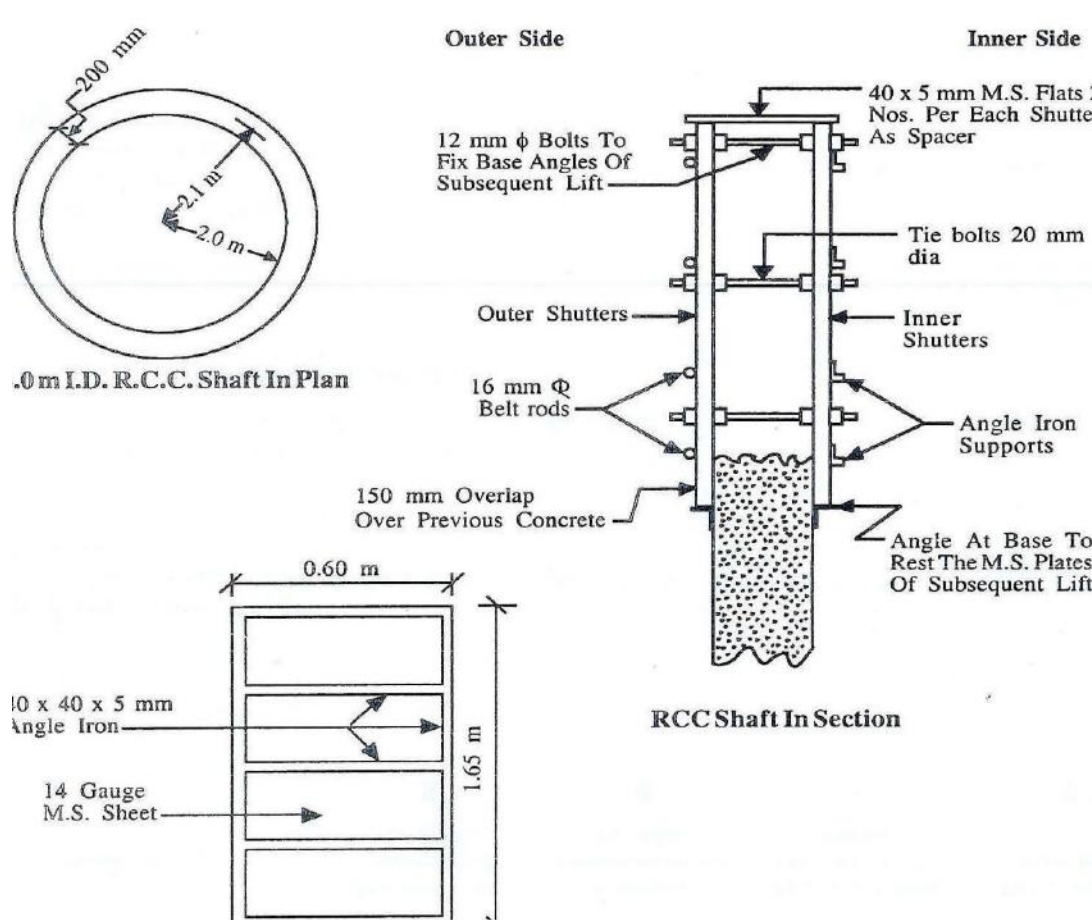


Code	Discription	Unit	Quantity	Rate	Amount

	Dimension of dome: $l = 5.00\text{m}$, $r = 0.90\text{m}$, $l/2 = 2.50\text{m}$ Height of dome up to springing = 5.00m To find radius R of dome $R = 1/2r \times [(l/2)^2 + r^2] = 3.92\text{ m}$ $\phi = 1/R \times [l/2] = 0.6377 = 39.62^\circ$ [to work out the rates for domes the primary requirement is that the height of dome must be confirmed as the cost increases much more due to height.] Here the height considered 5.00m from ground level. Contact area = $2\pi l r R = 22.17\text{ sqm}$				
	MATERIALS				
05041	(A) MS sheet 16 gauge Area of dome = 22.17 sqm Add for overlap = 3.31 sqm Total = 25.48 sqm Add for wastage 1.52 sqm Total $27.0\text{ sqm} = 338.85\text{ kg} = 0.339\text{t}$	q	3.39	₹ 4,532.00	₹ 1,535.67
0468	Carriage of sheets	tonnes	0.3390	₹ 110.94	₹ 37.61
					₹ 1,573.28
	Considering that these items can be used 40 times. Thus cost of using once=				₹ 39.33
	Considering the salvage value as 25% Net cost =	75%	of	₹ 39.33	₹ 29.50
04014	Timber: (i) 38 mm thick planks [For dome runners] Full runners: $21 \times 3 \times 1.20 \times 0.15 \times 0.038 = 0.4309\text{ cum}$ 2/3 rd runners: $21 \times 2 \times 1.20 \times 0.15 \times 0.038 = 0.5746\text{ cum}$ Piece on top of 2/3rd runner: $21 \times 1 \times 0.25 \times 0.15 \times 0.038 = 0.1231\text{ cum}$ At springing: $1 \times 18 \times 1.20 \times 0.15 \times 0.038 = 0.1231\text{ cum}$ Top of centre table: $4 \times 0.60 \times 0.15 \times 0.038 = 0.0137\text{ cum}$ For joining ballies: $42 \times 4 \times 1.20 \times 0.1 \times 0.038 = 0.766\text{ cum}$ Total = 1.938 cum Add for wastage 0.097 cum Total = $2.035\text{ cum} = 2035\text{ cudm}$ (ii) 75mmx50mm runner pieces: 150 mm long over angles- $21 \times 2 \times 0.15 \times 0.075 \times 0.05 = 0.0236\text{ cum}$ $42 \times 2 \times 0.15 \times 0.075 \times 0.05 = 0.0473\text{ cum}$ Total = 0.0709 cum Add for wastage = 0.0031 cum Total = $0.074\text{ cum} = 74\text{ cudm}$	10 cumd	2109.00	₹ 145.00	₹ 30,580.50
0473	Carriage of timber	cum	2.1090	₹ 80.65	₹ 170.09
					₹ 30,750.59
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 615.01
05056	(i) 35mmx35mmx5mm Angle iron Outer row: $1 \times 12.0 = 12.0\text{m}$ Inner row: $1 \times 6.0 = 6.00$ Total = $18.0\text{ m} @ 2.6\text{ kg/m} = 46.8\text{ kg} = 0.468\text{q}$	q	0.468	₹ 4,267.00	₹ 1,996.96

05039	(ii) 20 mmØ rods: 1st row: 1x14.50 = 14.50 m 2nd row: 1x9.0 = 9.00 m 3rd row: 1x3.00 = 3.00 m Total = 26.50 m Add for wastage = 1.50 m Total = 28.00 m @ 2.46 kg/m = 68.88 kg = 0.688q	q	0.688	₹ 4,010.00	₹ 2,758.88
0468	Carriage of sheets	tonnes	0.1156	₹ 110.94	₹ 12.82
					₹ 4,768.66
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 39.74
	Considering the salvage value as 25% Net cost =	75%	of	₹ 39.74	₹ 29.81
04010	100mm Ø Ballies Vertical ballies: Outer row : 180Nos./, 5m long = 90.0m 2nd row: 12 Nos, 5.30m long = 63.60m 3rd row: 6 Nos. 5.0m long = 33.60m For centr table = 6 Nos. 5.90m long = 35.40 m At struts for domes: Outer row: 1 Nos 0.50 m long = 7.50 m Middle row: 10 Nos 1.00m long = 10.00m Inner row: 6 Nos 1.20m long = 7.20m Total = 247.30m Add for wastage = 12.70m Total = 260.00m 80mmØ as braces: Radial ballies: 18x6x2.50 = 270.0m Circumferential outer row: 18x6x2.25 = 243.00m 1st Row: 12x6x2.25 = 162.0m 3rd row: 6x6x2.25 = 81.0m Centre table: 6x12x1.50(ave.) = 108.0m Add wastage = 36.00m Total = 900.0m	m	460.00	₹ 59.00	₹ 27,140.00
0473	Carriage of timber	cum	6.01	₹ 80.65	₹ 484.71
					₹ 27,624.71
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 552.49
	LABOUR: For making				
0208*	Carpenter	Day	3.50	₹ 400.00	₹ 1,400.00
0212	Coolie	Day	3.50	₹ 300.00	₹ 1,050.00
					₹ 2,450.00
	Considering that the boxes can be used 4 times. Thus cost of using once=				₹ 612.50
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	2.00	₹ 425.00	₹ 850.00
0208*	Carpenter	Day	5.00	₹ 400.00	₹ 2,000.00
0212	Helper/Coolie	Day	25.00	₹ 300.00	₹ 7,500.00
					₹ 12,189.31
	Add for Nails, shuttering oil, curved cover blocks, scaffoldings, safety & security etc	@	20%		₹ 2,437.86
					₹ 14,627.17
	Add for Sundries and contingencies	@	3%		₹ 438.82

					₹ 15,065.99
	Add for contractor's profit and overheads	@	15%		₹ 2,259.90
	Cost of formwork for 22.17 sqm. Area				₹ 17,325.89
	Cost of formwork per sqm				₹ 781.50
	Rate per sqm.	Say			₹ 781.50

5.9.10 R.C.C.Chimneys and shafts					
					
Code	Discription	Unit	Quantity	Rate	Amount
	Consider the form work for an RCC shaft with 4.0 m (I.D.) and 200 mm width. The form work is proposed to be executed with 600mm wide and 1.65 m high MS plates. The no. of form panels required per lift for outer face = $1/0.60 \times (\pi \times 4.40) = 23.03 \approx 23$ shutters For inner face: $1/0.60 \times (\pi \times 4.00) = 20.94 \approx 21$ shutters Height of shutters: Max. ht. of pouring of concrete 1.50m and each shutter has to be overlapped by 150 mm with the previous concrete. Hence, the maxi. height of shutter = $1.50 + 0.15 = 1.65$ m Contact are of shuttering for each lift = $2 \times \pi \times 4.20 \times 1.50 = 39.58$ sqm				

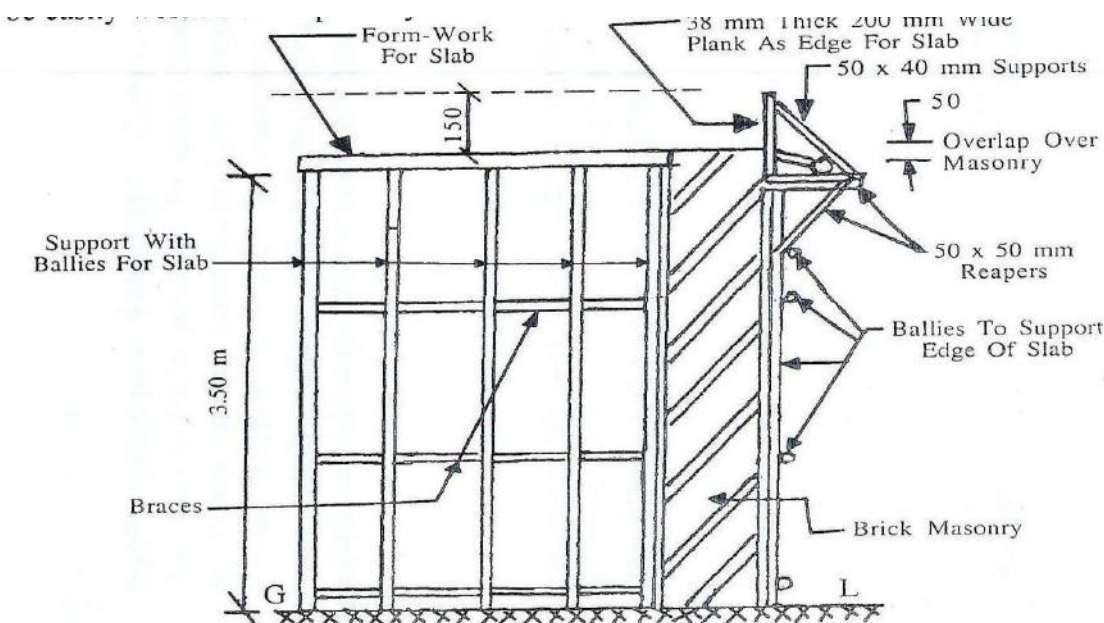
	MATERIALS				
05041	(A) MS sheet 14 gauge 1x23x0.6x1.65 = 22.77 sqm 1x21x0.60x1.65 = 20.79 sqm Total = 43.56 sqm Add for wastage 2.44 sqm Total 46 sqm = 722.2 kg = 7.22q In practice it is advisable to use the size and number of shutters as follows: Outer shutters 22 Nos. 0.628 m wide and Inner shutters 22 Nos. 0.57 m wide. However for analysis of rate we are considering same size shutter for outer and inner sides.	q	7.22	₹ 4,532.00	₹ 3,272.10
05056	Angle iron (40x40x5mm) Vrticals: Outer and inner shutters: 44x2x1.65 = 145.20 m Horizontals: 44x5x0.60 = 132.00m Total = 277.20 m @ 3.0kg/m = 831.6 kg = 8.32q	q	8.32	₹ 4,267.00	₹ 3,550.14
05056	Angle iron (40x40x5mm) for base support Angle on outer face= 1x1x4.40 = 13.82 m Angle on inner face = 1x1x4.00 = 12.57 m Total = 26.39 m @ 3.0kg/m = 79.17 kg = 0.8q	q	0.80	₹ 4,267.00	₹ 341.36
05056	Angle iron (40x40x5mm) for supporting inner face 1x4x1x4.00 = 50.27 m Total = 50.27 m @ 3.0kg/m = 150.81 kg = 1.51q	q	1.51	₹ 4,267.00	₹ 644.32
05026	40x5 mm MS flats = 2x22x0.30 = 13.2 m@ 1.57 kg/m = 20.72 kg = 0.21 q	q	0.21	₹ 3,992.00	₹ 83.83
05039	16mmØ belt rods to support outer shutters = 1x4x1x4.40 = 55.29 m@ 1.58kg/m = 87.36 kg ≈ 0.90q	q	0.90	₹ 4,010.00	₹ 360.90
0468	Carriage	tonnes	1.9000	₹ 110.94	₹ 210.79
					₹ 8,463.44
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 70.53
	Considering the salvage value as 25% Net cost =	75%	of	₹ 70.53	₹ 52.90
05030	10 mm dia 25 mm long bolts for fixing shutters (i) For fixing shutter to shutter vertically = 44x12.0= 528 Nos. For fixing bottom face of shutter 44x5.0 = 220 Nos For fixing flats at top 22x2x2 = 88 Nos. Total = 836 Nos. Add wastage = 14 Nos. Total = 850 Nos.	each	850	₹ 14.00	₹ 11,900.00
05028	12 mm dia 300 mm long bolts threaded on both sides to fix bottom angle = 44 Nos.	each	44	₹ 22.00	₹ 968.00
05061	Tie bolt 20 mm dia and 225 mm long = 1x3x22 = 66 Nos.	each	66	₹ 121.00	₹ 7,986.00
05039	Carriage	tonnes	0.0180	₹ 110.94	₹ 2.00
					₹ 20,856.00
	Considering that these items can be used 10 times. Thus cost of using once=				₹ 2,085.60

	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	2.50	₹ 425.00	₹ 1,062.50
0208*	Carpenter	Day	7.50	₹ 400.00	₹ 3,000.00
0212	Helper/Coolie	Day	7.50	₹ 300.00	₹ 2,250.00
					₹ 8,451.00
	Add for Nails, shuttering oil, double slotted cover blocks, scaffoldings, safety & security etc	@	15%		₹ 1,267.65
					₹ 9,718.65
	Add for Sundries and contingencies	@	3%		₹ 291.56
					₹ 10,010.21
	Add for contractor's profit and overheads	@	15%		₹ 1,501.53
	Cost of formwork for 39.58sqm. Area				₹ 11,511.74
	Cost of formwork per sqm				₹ 290.85
	Rate per sqm.	Say			₹ 290.90

5.9.11	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards.				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider the fig. Item No. 5.8 Contact are involved in 1st stage: Vertical: Sides = $4 \times 2 \times 1.25 \times 0.60 = 6.00$ sq Ends = $4 \times 2 \times 0.05 \times 1.25 = 0.50$ sqm Horizontals: Bottoms = $3 \times 0.95 \times 0.60 = 1.71$ sqm Edges = $3 \times 2 \times 0.95 \times 0.05 = 0.29$ sqm Total = 8.50 sqm				

	MATERIALS				
04014	Wooden planks 38 mm thick for verticals. Outermost fins: $2 \times 2 \times 1.25 \times 0.30 \times 0.038 = 0.057$ cum Remaining fins: $2 \times 3 \times 1.00 \times 0.30 \times 0.038 = 0.0684$ cum For ends: $2 \times 4 \times 1.25 \times 0.126 \times 0.038 = 0.048$ cum Portion above horizontal fins: $2 \times 3 \times 0.60 \times 0.20 \times 0.038 = 0.0274$ cum For horizontals: Bottoms = $3 \times 0.95 \times 2 \times 0.3 \times 0.038 = 0.065$ cum $3 \times 0.95 \times 1 \times 0.2 \times 0.038 = 0.022$ cum For edges: $3 \times 2 \times 0.95 \times 0.05 \times 0.038 = 0.011$ cum Total = 0.2988 cum = 0.30 cum = 300 cumd 75mmx50mm reapers for outermost vertical shutters $2 \times 3 \times 0.60 \times 0.075 \times 0.05 = 0.014$ cum For intermediat shutters = $6 \times 3 \times 0.60 \times 0.075 \times 0.05 = 0.041$ cum For horizontal shutters = $3 \times 3 \times 0.80 \times 0.075 \times 0.05 = 0.027$ cum Total = 0.082 cum = 82 cudm 50x25mm battens: $3 \times 3 \times 0.7 \times 0.05 \times 0.025 = 0.007875$ cum = 7.88 cudm	10 cumd	389.80	₹ 145.00	₹ 5,652.10
0473	Carriage of timber	cum	0.3900	₹ 80.65	₹ 31.45
	LABOUR: For making				
0208*	Carpenter	Day	1.10	₹ 400.00	₹ 440.00
0212	Coolie	Day	1.10	₹ 300.00	₹ 330.00
					₹ 6,453.55
	Considering that the boxes can be used 20 times. Thus cost of using once=				₹ 322.68
04010	75 mm/80mmØ ballies for support For vertical fins = $5 \times 3 \times 2 \times 1.00 = 30.0$ m For horizontal fins = $3 \times 3 \times 2 \times 1.00 = 18.00$ m Total = 48.00 m	m	48.00	₹ 59.00	₹ 2,832.00
0473	Carriage	cum	0.2100	₹ 80.65	₹ 16.94
					₹ 2,848.94
	Considering that these items can be used 50 times. Thus cost of using once=				₹ 56.98
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0208*	Carpenter	Day	1.60	₹ 400.00	₹ 640.00
0212	Helper/Coolie	Day	1.60	₹ 300.00	₹ 480.00
					₹ 1,924.66
	Add for Nails, shuttering oil, cover blocks, scaffoldings etc	@	10%		₹ 192.47
					₹ 2,117.13
	Add for Sundries and contingencies	@	3%		₹ 63.51
					₹ 2,180.64
	Add for contractor's profit and overheads	@	15%		₹ 327.10
	Cost of formwork for 8.5sqm. Area				₹ 2,507.74

	Cost of formwork per sqm				₹ 295.03
	Rate per sqm.	Say			₹ 295.00

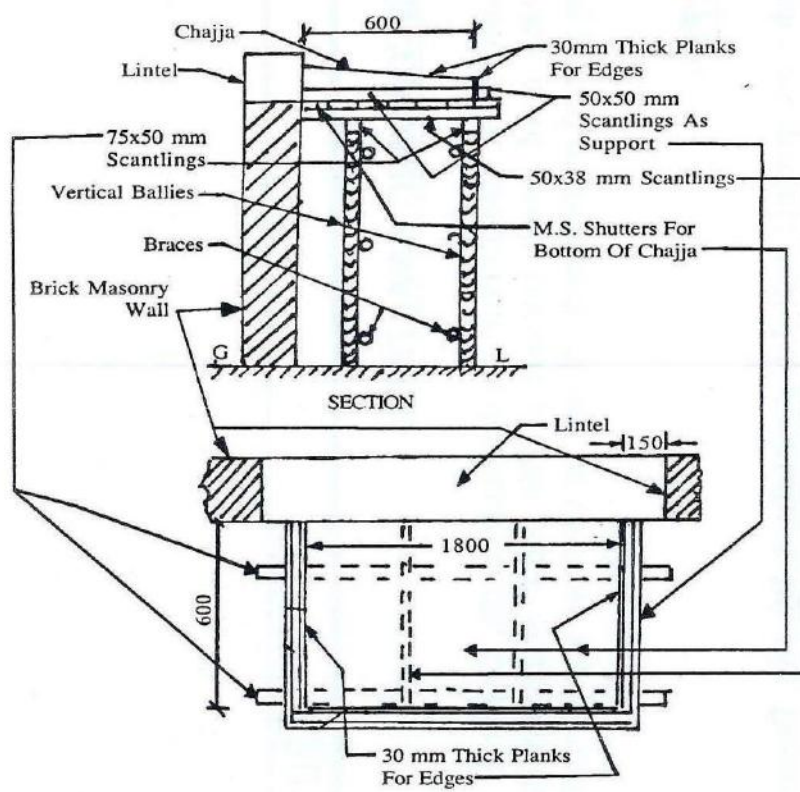
5.9.12.1	Edges of slabs and breaks in floors and walls under 20 cm. wide				
					
Code	Discription	Unit	Quantity	Rate	Amount
	Consider edges of slabs under 20 cms. Wide for a length of 10.0m				
	MATERIALS				
04014	Wooden planks 38 mm thick for edge of 10 m long slab 1x10.00x0.20x0.038 =0.076 cum or 76 cudm	10 cumd	76.00	₹ 145.00	₹ 1,102.00
04013	50x50 mm scantlings for brackets Horizontals 11x0.30x0.05x0.05 =0.00825 cum Inclined supports: 11x0.45x0.05x0.05 =0.0124 cum 50x40 mm inclined supports for the edge of slab: 1x34.00x0.05x0.040 =0.017 cum Total quantity 0.03765 cum of scantlilngs or = 37.65 cudm	10 cumd	37.65	₹ 137.00	₹ 515.81
04010	100 mm ø ballies for vertical supports 11x3.50 = 38.5 m Horizontal Bracings 75/80 mm ø ballies 5x11.00 = 55.00 m	m	93.50	₹ 59.00	₹ 5,516.50
0473	Carriage of timber	cum	0.5400	₹ 80.65	₹ 43.55
					₹ 7,177.86
	Considering that it can be used 20 times. Thus cost of using once=				₹ 358.89
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0208*	Carpenter	Day	0.40	₹ 400.00	₹ 160.00
0212	Helper/Coolie	Day	0.40	₹ 300.00	₹ 120.00
					₹ 723.89

	Add for Nails, shuttering oil, cover blocks, scaffoldings etc	@	7%		₹ 50.67
					₹ 774.56
	Add for Sundries and contingencies	@	3%		₹ 23.24
					₹ 797.80
	Add for contractor's profit and overheads	@	15%		₹ 119.67
	Cost of formwork for 10 m long edge for slab of width less than 200 mm				₹ 917.47
	Cost of formwork per m				₹ 91.75
	Rate per m.	Say			₹ 91.80

5.9.12.2	Edges of slabs and breaks in floors and walls above 20 cm. wide				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering the height of edge of slab as 250 mm the contact area for 10.0 m length of slab = $10.00 \times 0.25 = 2.5$ sqm.				
	MATERIALS				
04014	Wooden planks 38 mm thick for edges of slab for 10.0 m length = $1 \times 10.00 \times 0.30 \times 0.038 = 0.114$ cum or = 114 cudm	10 cumd	114.00	₹ 145.00	₹ 1,653.00
04013	50x50 mm scantlings for brackets Horizontals $11 \times 0.30 \times 0.05 \times 0.05 = 0.00825$ cum Inclined supports: $11 \times 0.45 \times 0.05 \times 0.05 = 0.0124$ cum 50x40 mm inclined supports for the edge of slab: $1 \times 34.00 \times 0.05 \times 0.040 = 0.017$ cum Total quantity 0.03765 cum of scantlilngs or = 37.65 cudm	10 cumd	37.65	₹ 137.00	₹ 515.81
04010	100 mm ø ballies for vertical supports $11 \times 3.50 = 38.5$ m Horizontal Bracings 75/80 mm ø ballies $5 \times 11.00 = 55.00$ m	m	93.50	₹ 59.00	₹ 5,516.50
0473	Carriage of timber	cum	0.6920	₹ 80.65	₹ 55.81
					₹ 7,741.12
	Considering that it can be used 20 times. Thus cost of using once=				₹ 387.06
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0208*	Carpenter	Day	0.55	₹ 400.00	₹ 220.00
0212	Helper/Coolie	Day	0.55	₹ 300.00	₹ 165.00
					₹ 857.06
	Add for Nails, shuttering oil, cover blocks, scaffoldings etc	@	7%		₹ 59.99
					₹ 917.05
	Add for Sundries and contingencies	@	3%		₹ 27.51
					₹ 944.56
	Add for contractor's profit and overheads	@	15%		₹ 141.68
	Cost of formwork for 10 m long edge for slab of width more than 200 mm				₹ 1,086.24

	Cost of formwork per m				₹ 108.62
	Rate per m.	Say			₹ 108.60

5.9.13 Weather shade, Chajjas, corbels etc., including edges.



Code	Discription	Unit	Quantity	Rate	Amount
	Contact area involved in one chajja shown in the figure Bottom: $1 \times 1.80 \times 0.60 = 1.08$ sqm Front: $1 \times 1.80 \times 0.075 = 0.14$ sqm Edges: $2 \times 0.60 \times 0.0875 = 0.11$ sqm Total: 1.33 sqm				
	MATERIALS				
05041	(A) M.S. sheet 14 guage $= 3 \times 0.60 \times 0.60 = 1.08$ sqm $= 1.08 \times 15.7$ kg/sqm 16.96 kg or 0.17 q	q	0.17	₹ 4,532.00	₹ 77.04
05056	(i) 40mmx40mmx5mm Angle Iron verticals = $3 \times 2 \times 0.60 = 3.60$ m Horizontals = $3 \times 2 \times 0.60 = 5.40$ m Total = 9.00 m @ 3 kg/m = 27.00 kg or 0.27 q	q	0.27	₹ 4,267.00	₹ 115.21
0468	Carriage	tonnes	0.0440	₹ 110.94	₹ 4.88
MR	Manufacturing steel plates: Cuttilng, Welding, including drillilng holes to manufacture the steel forms: 0.044 t	tonnes	0.4400	₹ 850.00	₹ 374.00
					₹ 571.13
	Considering that these items can be used 120 times. Thus cost of using once=				₹ 4.76
	Considering the salvage value as 25% Net cost =	75%	of	₹ 4.76	₹ 3.57
04014	30mm thick planks for edges of chajja Front: $= 1 \times 1.85 \times 0.075 \times 0.03 = 0.00416$ cum On both ends $= 1 \times 0.60 \times 0.075 \times 0.03 = 0.00315$ cum Total = 0.00731 cum or 7.31 cudm	10 cumd	7.31	₹ 145.00	₹ 106.00

04013	75mmx50mm scantlings for bottom support= $2 \times 2.35 \times 0.075 \times 0.05 = 0.0176$ cum or 17.63 cudm 75mmx50mm scantlings along bottom of chajja $4 \times 0.85 \times 0.075 \times 0.05 = 0.0128$ or 12.80 cudm 50mmx38mm scantlings in between steel plates $2 \times 0.85 \times 0.05 \times 0.038 = 0.00323$ cum or 3.23 cudm 50mmx50mm scantlings to support the edges. To support front edge = $1 \times 1.85 \times 0.05 \times 0.05 = 0.004625$ cum To support sides= $2 \times 0.60 \times 0.05 \times 0.05 = 0.003$ cum Total = 0.007625 cum or = 7.63 cudm	10 cumd	41.29	₹ 137.00	₹ 565.67
04010	100 mm ϕ ballies for vertical supports = $9 \times 3.25 = 29.25$ m 75/80 mm ballies for braces = $2 \times 3 \times 2.35 = 14.10$ m	m	43.35	₹ 59.00	₹ 2,557.65
0473	Carriage of timber	cum	0.3386	₹ 80.65	₹ 27.31
					₹ 3,256.63
	Considering that it can be used 20 times. Thus cost of using once=				₹ 162.83
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.25	₹ 400.00	₹ 100.00
0212	Helper/Coolie	Day	0.25	₹ 300.00	₹ 75.00
					₹ 383.90
	Add for Nails, shuttering oil, cover blocks, scaffoldings etc	@	10%		₹ 38.39
					₹ 422.29
	Add for Sundries and contingencies	@	3%		₹ 12.67
					₹ 434.96
	Add for contractor's profit and overheads	@	15%		₹ 65.24
	Cost of formwork for 1.33 sqm formwork for RCC chajja				₹ 500.20
	Cost of formwork per sqm				₹ 376.09
	Rate per sqm.	Say			₹ 376.10

5.9.14	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string

Code	Discription	Unit	Quantity	Rate	Amount
	As this is a small item the most convenient materials that can be used is well planed and straightened Kail II planks of smooth surfaces and neat edges with special arrangements to fix with bolts as shown in Fig. No nail used General Details No. of lintel=4 Nos. Length of lintel = 1200 mm Width of lintel = 225 mm Heigh of lintel = 150 mm Contact Area Bottom: 4x2x1.20x0.05=0.48 sqm Sides: 4x2x1.50x0.15=1.80 sqm Ends 4x2x0.225x0.15=0.27 sqm Total = 2.55 sqm				
	MATERIALS				
04014	(i) Timber planks Shutters for bottom face: Horizontals 4x2x1.20x0.05x0.038=0.018 cum Additional piece below 4x2x1.20x0.038x0.05=0.015 cum Sides planks 4x2x1.675x0.038x0.05=0.025 cum End shutters 4x2x0.225x0.15x0.038=0.010 cum Side pieces to fix with bolts 4x2x2x0.15x0.038x0.05=0.006 cum Total 0.199 cum Say 0.20 cum or 200 cudm.	10 cumd	200.00	₹ 145.00	₹ 2,900.00
0473	Carriage of timber	cum	0.2000	₹ 80.65	₹ 16.13
	LABOUR: For preparing				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.60	₹ 400.00	₹ 240.00
0212	Helper/Coolie	Day	0.60	₹ 300.00	₹ 180.00
					₹ 3,378.63
	Considering that these items can be used 60 times. Thus cost of using once=				₹ 56.31
05026	40x 5 mm M.S. flats as spacers 4x6x0.401=9.624 m or 9.62x1.57kg/m=15.10 kgs i.e. 0.15 q	q	0.15	₹ 3,992.00	₹ 598.80
05030	10 mm ø - 50 mm long bolts 4x6x2=48 Nos.	each	48	₹ 14.00	₹ 672.00
05030	10mm ø - 75 mm long bolts to fix side shutters with bottom =4x4x2 = 32 Nos. 10mm ø 75 mm long bolts to fix end shutters =4x4x2 = 32 Nos. Total = 32 Nos.	each	32	₹ 14.00	₹ 448.00
					₹ 1,718.80
	Considering that these items can be used 80 times. Thus cost of using once=				₹ 21.49
	Considering the salvage value as 25% Net cost =	75%	of	₹ 21.49	₹ 16.12

04013	Balliles with 'T' head shore Timber for Tee head shore 50x75mm scantlings= 4x2x0.50x0.075x0.05=0.015 cum or = 15 cudm 50x38 mm scantlings =4x2x2x0.050x0.038=0.030 cum or = 30 cudm Total quantity of scantlings = 45 cudm	10 cudm	7.31	₹ 137.00	₹ 100.15
04010	100 mm ø ballies 4x2x2.10 = 16.8 m	m	43.35	₹ 59.00	₹ 2,557.65
0473	Carriage of timber	cum	0.3386	₹ 80.65	₹ 27.31
					₹ 2,685.11
	Considering that it can be used 40 times. Thus cost of using once=				₹ 67.13
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0208*	Carpenter	Day	0.60	₹ 400.00	₹ 240.00
0212	Helper/Coolie	Day	0.60	₹ 300.00	₹ 180.00
					₹ 623.31
	Add for Nails, shuttering oil, cover blocks, scaffoldings etc	@	18%		₹ 112.20
					₹ 735.51
	Add for Sundries and contingencies	@	3%		₹ 22.07
					₹ 757.58
	Add for contractor's profit and overheads	@	15%		₹ 113.64
	Cost of formwork for 2.55 sqm of contact area				₹ 871.22
	Cost of formwork per sqm				₹ 387.21
	Rate per sqm.	Say			₹ 387.20

5.9.15	Cornices and mouldings

Code	Discription	Unit	Quantity	Rate	Amount
	Dimentions: Length of cornices = 600 mm Width of cornice = 200 mm Number of Projections = 3 Nos. Breadth of supporting wall = 225 mm Height of individual Projection 200 mm Height of Cornice 600 mm Contact Area Bottoms:3x0.20x0.20 = 0.12 sqm Front ends:3x0.20x0.20=0.12 sqm Rear End:1x0.20x0.60 = 0.12 sqm Sides: 2x0.825x0.20=0.33 sqm 2x0.625x0.20=0.25 sqm 2x0.425x0.20=0.17 sqm Total = 1.11 sqm				
	MATERIALS				
04014	(i) Timber planks Bottoms:3x0.20x0.20x0.038=0.0046 cum Additional pieces to fix the bolts:3x3x0.20x0.05x0.038=0.0034 cum Side planks: 2x0.825x0.25x0.038=0.016 cum 2x0.625x0.20x0.038=0.010 cum 2x0.425x0.20x0.038=0.0065 cum Additional pieces to fix the bolts on rear side:2x0.60x0.05x0.038=0.003 cum On front side:3x2x0.20x0.05x0.038=0.003 cum Closing ends:Rear side=1x0.3x0.60x0.038=0.007 cum Front side:3x0.3x0.25x0.038=0.0086 cum for cap on vertical balliles:3x0.30x0.075x0.05=0.034 cum Total= 0.0961cum	10 cumd	96.10	₹ 145.00	₹ 1,393.45
04013	(i) Scantling: 50x38mm battens to join the planks 2x2x0.60x0.05x0.038=0.0046 cum 2x1x0.40x0.05x0.0038=0.0015 cum 2x1x0.20x0.05x0.038=0.0008 cum For fixing top spacers 2x0.825x0.05x0.038=0.0031 cum Total= 0.01cum	10 cumd	10.00	₹ 137.00	₹ 137.00
0473	Carriage of timber	cum	0.1061	₹ 80.65	₹ 8.56
	LABOUR:				
	For preparing				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0208*	Carpenter	Day	0.30	₹ 400.00	₹ 120.00
0212	Helper/Coolie	Day	0.30	₹ 300.00	₹ 90.00
					₹ 1,812.76
	Considering that these items can be used 60 times. Thus cost of using once=				₹ 30.21
05026	50x5 mm flats for spacers: 6x0.30 = 1.80 m @1.57kg/m2.82 kg or = 0.03q	q	0.03	₹ 3,992.00	₹ 119.76
05027	Bolts and nuts:10 mm ø - 125 mm long To fix bottom shutters:3x6 Nos. = 18 Nos. To fix rear shutter:2x6 Nos. = 12 Nos. To fix front verticals:3x2x3 Nos. 18 Nos. To fix to spacers:2x 6 Nos. = 12 Nos. Total = 62 Nos.	each	62	₹ 12.00	₹ 744.00

05059	12mm ϕ - 450 mm long cross bolts in side shutters = 9 Nos.	each	9	₹ 155.00	₹ 1,395.00
					₹ 2,258.76
	Considering that these items can be used 150 times. Thus cost of using once=				₹ 15.06
	Considering the salvage value as 25% Net cost =	75%	of	₹ 15.06	₹ 11.30
04010	100 mm ϕ ballies: Vertical ballies as support 1x0.2 m = 0.20 m 1x0.40 m = 0.40 m 1x0.60 m = 0.60 m Horizontal ballies 1x2.0 = 2.00 m Inner inclined 1x1.5 m = 1.50 m Outer inclined 1x2.5 = 2.50 m Cross supports from sides 2x6x2.00 = 24.00 =31.20 m Say 32.0 m	m	32.00	₹ 59.00	₹ 1,888.00
0473	Carriage of timber	cum	0.2500	₹ 80.65	₹ 20.16
					₹ 1,908.16
	Considering that it can be used 50 times. Thus cost of using once=				₹ 38.16
	LABOUR: For fixing and releasing form work				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0208*	Carpenter	Day	0.30	₹ 400.00	₹ 120.00
0212	Helper/Coolie	Day	0.30	₹ 300.00	₹ 90.00
					₹ 332.17
	Add for Nails, shuttering oil, cover blocks, scaffoldings etc	@	17%		₹ 56.47
					₹ 388.64
	Add for Sundries and contingencies	@	3%		₹ 11.66
					₹ 400.30
	Add for contractor's profit and overheads	@	15%		₹ 60.05
	Cost of formwork for 1.11 sqm of contact area				₹ 460.35
	Cost of formwork per sqm				₹ 414.73
	Rate per sqm.	Say			₹ 414.70

5.10	Providing and fixing tie bolt, spring coil and plastic cone in wall shuttering complete as per the Engineer-in-charge				
5.10.1	12 mm dia. & 100 mm length.				
Code	Discription	Unit	Quantity	Rate	Amount
	No. of sets to be provided = 40 sets				

	MATERIALS				
05057	Tie bolts 12Ø mm & length 100 mm	each	40	₹ 52.00	₹ 2,080.00
05051	Spring coil 12Ø mm	each	80	₹ 15.00	₹ 1,200.00
05045	Plastic cone 12Ø mm	each	80	₹ 18.00	₹ 1,440.00
					₹ 4,720.00
	Add for Sundries and contingencies	@	3%		₹ 141.60
					₹ 4,861.60
	Add for contractor's profit and overheads	@	15%		₹ 729.24
	Cost of 40 sets of tie bolts of specified size and length				₹ 5,590.84
	Cost of per set of tie bolt				₹ 139.77
	Rate per set	Say			₹ 139.80

5.10.2	12 mm dia. & 150 mm length.				
Code	Discription	Unit	Quantity	Rate	Amount
	No. of sets to be provided = 40 sets				
	MATERIALS				
05058	Tie bolts 12Ø mm & length 150 mm	each	40	₹ 69.00	₹ 2,760.00
05051	Spring coil 12Ø mm	each	80	₹ 15.00	₹ 1,200.00
05045	Plastic cone 12Ø mm	each	80	₹ 18.00	₹ 1,440.00
					₹ 5,400.00
	Add for Sundries and contingencies	@	3%		₹ 162.00
					₹ 5,562.00
	Add for contractor's profit and overheads	@	15%		₹ 834.30
	Cost of 40 sets of tie bolts of specified size and length				₹ 6,396.30
	Cost of per set of tie bolt				₹ 159.91
	Rate per set	Say			₹ 159.90

5.10.3	20 mm dia. & 150 mm length.				
Code	Discription	Unit	Quantity	Rate	Amount
	No. of sets to be provided = 40 sets				
	MATERIALS				
05060	Tie bolts 20Ø mm & length 150 mm	each	40	₹ 98.00	₹ 3,920.00
05051	Spring coil 12Ø mm	each	80	₹ 15.00	₹ 1,200.00
05045	Plastic cone 12Ø mm	each	80	₹ 18.00	₹ 1,440.00
					₹ 6,560.00
	Add for Sundries and contingencies	@	3%		₹ 196.80
					₹ 6,756.80
	Add for contractor's profit and overheads	@	15%		₹ 1,013.52
	Cost of 40 sets of tie bolts of specified size and length				₹ 7,770.32
	Cost of per set of tie bolt				₹ 194.26
	Rate per set	Say			₹ 194.30

5.10.4	20 mm dia. & 225 mm length.				
Code	Discription	Unit	Quantity	Rate	Amount
	No. of sets to be provided = 40 sets				
	MATERIALS				
05061	Tie bolts 20Ø mm & length 150 mm	each	40	₹ 121.00	₹ 4,840.00
05051	Spring coil 12Ø mm	each	80	₹ 15.00	₹ 1,200.00
05045	Plastic cone 12Ø mm	each	80	₹ 18.00	₹ 1,440.00
					₹ 7,480.00
	Add for Sundries and contingencies	@	3%		₹ 224.40
					₹ 7,704.40
	Add for contractor's profit and overheads	@	15%		₹ 1,155.66
	Cost of 40 sets of tie bolts of specified size and length				₹ 8,860.06
	Cost of per set of tie bolt				₹ 221.50
	Rate per set	Say			₹ 221.50

5.11	Extra for additional height in centring, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentring at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof: Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).				
Code	Discription	Unit	Quantity	Rate	Amount
	Dimintions: Details of cost for a Room of size 6mx4.8m =28.8 sqm				
	MATERIALS				
05049	Prop 4m : 3x7 = 21 Nos.	Each	21	₹ 1,584.00	₹ 33,264.00
05003	Prop 3m : 3x7 = 21 Nos.	Each	21	₹ 1,452.00	₹ 30,492.00
04018	M.S. Tube: 7x4.8m = 33.60m 3x6.0m= 18.00m Total = 51.6 m	m	51.60	₹ 328.00	₹ 16,924.80
05023	Double coupler (40x40)	Each	21	₹ 73.00	₹ 1,533.00
0468	Carriage	tonne	1.1950	₹ 110.94	₹ 132.57
					₹ 82,346.37
	Considering that these items can be used 40 times. Thus cost of using once=				₹ 2,058.66
	Considering the salvage value as 25% Net cost =	75%	of	₹ 2,058.66	₹ 1,544.00
	LABOUR: For fixing and releasing form work				
0215	Fitter Grade -I	Day	3.00	₹ 380.00	₹ 1,140.00
0203	Belder	Day	6.00	₹ 300.00	₹ 1,800.00
					₹ 4,484.00
	Add for Sundries and contingencies	@	3%		₹ 134.52
					₹ 4,618.52
	Add for water charges	@	1%		₹ 46.19
					₹ 4,664.71
	Add for contractor's profit and overheads	@	15%		₹ 699.71
	Cost of formwork for 28.8sqm of contact area				₹ 5,364.42
	Cost of formwork per sqm				₹ 186.26
	Rate per sqm.	Say			₹ 186.30

5.12	Encasing rolled steel sections, in beams and columns, with cement concrete including centring and shuttering complete but excluding cost of reinforcement.				
5.12.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	2 Nos. R.S. Joists 75mmx125mm placed at 300 mm c/c apart and 3.45 m long stanchions. Thus with a 50mm cover on all sides the size of encased stanchion will be 3.55m long, 0.745m wide and 0.225m deep giving a total quantity of concrete 0.38 cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.2565	₹ 3,969.00	₹ 1,018.05
04007	Stone aggregate 12mm	cum	0.0855	₹ 4,005.00	₹ 342.43
02003	Fine sand	cum	0.171	₹ 370.00	₹ 63.27
03001	Cement	tonne	0.2318	₹ 6,100.00	₹ 1,413.98
0.00	CARRIAGE				
0405	Stone aggregate	cum	0.342	₹ 159.75	₹ 54.63
0425	Fine sand	cum	0.171	₹ 142.63	₹ 24.39
0421	Cement	tonne	0.2318	₹ 110.94	₹ 25.72
	Form work for stanchion: Four sides of encasement: 2x3.55x0.225 = 1.60sqm 2x0.475x0.225 = 0.21sqm Total = 1.81sqm [vide Item No. 5.9.6.3]	sqm	1.81	₹ 441.22	₹ 798.61
0.00	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.050	₹ 400.00	₹ 20.00
0203	Beldar (M)	Day	0.20	₹ 300.00	₹ 60.00
0212	Coolie (F)	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhishti/Waterman	Day	0.100	₹ 300.00	₹ 30.00
					₹ 3,932.33
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.00%		₹ 39.32
					₹ 3,971.65
	Add for testing stone aggregate, sand, water and concrete cubes, scaffolding etc.	@	3.50%		₹ 139.01
					₹ 4,110.66
	Add for Sundries and contingencies	@	3%		₹ 123.32
					₹ 4,233.98
	Add for water charges	@	1%		₹ 42.34
					₹ 4,276.32
	Add for contractor's profit and overheads	@	15%		₹ 641.45
	Cost of providing and laying 0.38cum. of cement concrete				₹ 4,917.77
	Cost of encasing per cum. of cement concrete				₹ 12,941.50
	Rate per cum.	Say			₹ 12,941.50

5.12.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.25137	₹ 3,969.00	₹ 997.69
04007	Stone aggregate 12mm	cum	0.08379	₹ 4,005.00	₹ 335.58
02003	Fine sand	cum	0.16758	₹ 370.00	₹ 62.00
03001	Cement	tonne	0.15	₹ 6,100.00	₹ 927.20
	CARRIAGE				
0405	Stone aggregate	cum	0.33516	₹ 159.75	₹ 53.54
0425	Fine sand	cum	0.16758	₹ 142.63	₹ 23.90
0421	Cement	tonne	0.15	₹ 110.94	₹ 16.86
	Form work for stanchion: Four sides of encasement: 2x3.55x0.225 = 1.60sqm 2x0.475x0.225 = 0.21sqm Total = 1.81sqm [vide Item No.5.9.6.3]	sqm	1.81	₹ 441.22	₹ 798.61
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.050	₹ 400.00	₹ 20.00
0203	Beldar (M)	Day	0.20	₹ 300.00	₹ 60.00
0212	Coolie (F)	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhishti/Waterman	Day	0.100	₹ 300.00	₹ 30.00
					₹ 3,406.63
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.00%		₹ 34.07
					₹ 3,440.70
	Add for testing stone aggregate, sand, water and concrete cubes, scaffolding etc.	@	3.50%		₹ 120.42
					₹ 3,561.12
	Add for Sundries and contingencies	@	3%		₹ 106.83
					₹ 3,667.95
	Add for water charges	@	1%		₹ 36.68
					₹ 3,704.63
	Add for contractor's profit and overheads	@	15%		₹ 555.69
	Cost of providing and laying 0.38cum. of cement concrete				₹ 4,260.32
	Cost of encasing per cum. of cement concrete				₹ 11,211.37
	Rate per cum.	Say			₹ 11,211.40

5.12.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.2679	₹ 3,969.00	₹ 1,063.30
04007	Stone aggregate 12mm	cum	0.0893	₹ 4,005.00	₹ 357.65
02003	Fine sand	cum	0.1786	₹ 370.00	₹ 66.08
03001	Cement	tonne	0.12	₹ 6,100.00	₹ 741.76
	CARRIAGE				
0405	Stone aggregate	cum	0.3572	₹ 159.75	₹ 57.06

0425	Fine sand	cum	0.1786	₹ 142.63	₹ 25.47
0421	Cement	tonne	0.12	₹ 110.94	₹ 13.49
	Form work for stanchion: Four sides of encasement: 2x3.55x0.225 = 1.60sqm 2x0.475x0.225 = 0.21sqm Total = 1.81sqm [vide Item No. 5.9.6.3]	sqm	1.81	₹ 441.22	₹ 798.61
	LABOUR:				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.125	₹ 400.00	₹ 50.00
0203	Beldar (M)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.125	₹ 300.00	₹ 37.50
					₹ 3,652.17
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	1.00%		₹ 36.52
					₹ 3,688.69
	Add for testing stone aggregate, sand, water and concrete cubes, scaffolding etc.	@	3.50%		₹ 129.10
					₹ 3,817.79
	Add for Sundries and contingencies	@	3%		₹ 114.53
					₹ 3,932.32
	Add for water charges	@	1%		₹ 39.32
					₹ 3,971.64
	Add for contractor's profit and overheads	@	15%		₹ 595.75
	Cost of providing and laying 0.38cum. of cement concrete				₹ 4,567.39
	Cost of encasing per cum. of cement concrete				₹ 12,019.45
	Rate per cum.	Say			₹ 12,019.50

5.13	Encasing rolled steel section in grillages with cement concrete including centring and shuttering but excluding cost of expanded metal and hangers.				
5.13.1	1:1:2 (1 Cement: 1 fine sand : 2 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering a grillage of size 3.90m long, 1.25m wide and 0.55m depth Qty. of concrete in 3 grillages: 3x3.90x1.25x0.55 = 8.04 cum say 8.00cum				
	MATERIALS				
04006	Stone aggregate 20mm	cum	5.4	₹ 3,969.00	₹ 21,432.60
04007	Stone aggregate 12mm	cum	1.8	₹ 4,005.00	₹ 7,209.00
02003	Fine sand	cum	3.6	₹ 370.00	₹ 1,332.00
03001	Cement	tonne	4.88	₹ 6,100.00	₹ 29,768.00
	CARRIAGE				
0405	Stone aggregate	cum	7.2	₹ 159.75	₹ 1,150.20
0425	Fine sand	cum	3.6	₹ 142.63	₹ 513.47
0421	Cement	tonne	4.88	₹ 110.94	₹ 541.39

	Form work 3x2x3.90x0.55 = 12.87sqm 3x2x1.25x0.55 = 4.13sqm Total = 17.00sqm [vide Item No. 5.9.1.2]	sqm	17	₹ 262.46	₹ 4,461.82
	LABOUR:				
0216	Foreman	Day	0.30	₹ 425.00	₹ 127.50
0218*	Mason	Day	2.00	₹ 400.00	₹ 800.00
0203	Beldar (M)	Day	6.50	₹ 300.00	₹ 1,950.00
0212	Coolie (F)	Day	6.50	₹ 300.00	₹ 1,950.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
					₹ 71,295.98
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	5.25%		₹ 3,743.04
					₹ 75,039.02
	Add for testing stone aggregate, sand, water and concrete cubes, scaffolding etc.	@	5.50%		₹ 4,127.15
					₹ 79,166.17
	Add for Sundries and contingencies	@	3%		₹ 2,374.99
					₹ 81,541.16
	Add for water charges	@	1%		₹ 815.41
					₹ 82,356.57
	Add for contractor's profit and overheads	@	15%		₹ 12,353.49
	Cost of providing and laying 8cum. of cement concrete				₹ 94,710.06
	Cost of encasing per cum. of grillage in cement concrete				₹ 11,838.76
	Rate per cum.	Say			₹ 11,838.80

5.13.2	1:1½:3 (1 Cement: 1½ fine sand : 3 graded stone aggregate 20 mm nominal size)				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
04006	Stone aggregate 20mm	cum	5.292	₹ 3,969.00	₹ 21,003.95
04007	Stone aggregate 12mm	cum	1.764	₹ 4,005.00	₹ 7,064.82
02003	Fine sand	cum	3.528	₹ 370.00	₹ 1,305.36
03001	Cement	tonne	3.20	₹ 6,100.00	₹ 19,520.00
	CARRIAGE				
0405	Stone aggregate	cum	7.056	₹ 159.75	₹ 1,127.20
0425	Fine sand	cum	3.528	₹ 142.63	₹ 503.20
0421	Cement	tonne	3.20	₹ 110.94	₹ 355.01
	Form work 3x2x3.90x0.55 = 12.87sqm 3x2x1.25x0.55 = 4.13sqm Total = 17.00sqm [vide Item No. 5.9.1.2]	sqm	17	₹ 262.46	₹ 4,461.82
	LABOUR:				
0216	Foreman	Day	0.30	₹ 425.00	₹ 127.50
0218*	Mason	Day	2.00	₹ 400.00	₹ 800.00
0203	Beldar (M)	Day	6.50	₹ 300.00	₹ 1,950.00
0212	Coolie (F)	Day	6.50	₹ 300.00	₹ 1,950.00

0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
					₹ 60,228.86
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	5.25%		₹ 3,162.02
					₹ 63,390.88
	Add for testing stone aggregate, sand, water and concrete cubes, scaffolding etc.	@	5.50%		₹ 3,486.50
					₹ 66,877.38
	Add for Sundries and contingencies	@	3%		₹ 2,006.32
					₹ 68,883.70
	Add for water charges	@	1%		₹ 688.84
					₹ 69,572.54
	Add for contractor's profit and overheads	@	15%		₹ 10,435.88
	Cost of providing and laying 8cum. of cement concrete				₹ 80,008.42
	Cost of encasing per cum. of grillage in cement concrete				₹ 10,001.05
	Rate per cum.	Say			₹ 10,001.10

5.13.3	1:2:4 (1 Cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIALS				
04006	Stone aggregate 20mm	cum	5.64	₹ 3,969.00	₹ 22,385.16
04007	Stone aggregate 12mm	cum	1.88	₹ 4,005.00	₹ 7,529.40
02003	Fine sand	cum	3.76	₹ 370.00	₹ 1,391.20
03001	Cement	tonne	2.56	₹ 6,100.00	₹ 15,616.00
	CARRIAGE				
0405	Stone aggregate	cum	7.52	₹ 159.75	₹ 1,201.32
0425	Fine sand	cum	3.76	₹ 142.63	₹ 536.29
0421	Cement	tonne	2.56	₹ 110.94	₹ 284.01
	Form work 3x2x3.90x0.55 = 12.87sqm 3x2x1.25x0.55 = 4.13sqm Total = 17.00sqm [vide Item No. 5.9.1.2]	sqm	17	₹ 262.46	₹ 4,461.82
	LABOUR:				
0216	Foreman	Day	0.30	₹ 425.00	₹ 127.50
0218*	Mason	Day	2.00	₹ 400.00	₹ 800.00
0203	Beldar (M)	Day	6.50	₹ 300.00	₹ 1,950.00
0212	Coolie (F)	Day	6.50	₹ 300.00	₹ 1,950.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
					₹ 58,292.70
	Add cost of hire and running charges of mixer, vibrator, water pump, chute, ladders etc.	@	5.25%		₹ 3,060.37
					₹ 61,353.07
	Add for testing stone aggregate, sand, water and concrete cubes, scaffolding etc.	@	5.50%		₹ 3,374.42
					₹ 64,727.49

	Add for Sundries and contingencies	@	3%		₹ 1,941.82
					₹ 66,669.31
	Add for water charges	@	1%		₹ 666.69
					₹ 67,336.00
	Add for contractor's profit and overheads	@	15%		₹ 10,100.40
	Cost of providing and laying 8cum. of cement concrete				₹ 77,436.40
	Cost of encasing per cum. of grillage in cement concrete				₹ 9,679.55
	Rate per cum.	Say			₹ 9,679.60

5.14	Extra for providing and fixing expanded metal mesh of size 20x60mm and strands 3.25mm wide 1.6mm thick weighing 3.64 kg. per sqm. for encasing of rolled steel sections in beams, columns and grillages excluding cost of hangers.				
Code	Description	Unit	Quantity	Rate	Amount
	Consider the rolled steel joists of size 150x300mm to which the mesh of expanded metal has to be provided. Thus as the mesh has to be provided at the centre of 50mm cover thickness, the area of covering for a R.S.J. of 4.0m length shall be = $4.0 \times (2 \times 0.20 + 2 \times 0.35 + 0.10) = 4.80 \text{ sqm}$ Hence, for four RSJs the qty. of expanded metal = $4 \times 4.80 = 19.20 \text{ sqm}$				
	MATERIALS				
05034	Expanded metal as specified = 19.20 sqm Add wastage = 0.80sqm Total = 20.0sqm	sqm	20	₹ 314.00	₹ 6,280.00
	CARRIAGE				
0468	20 sqm@3.64kg/sqm = 72.8 kg = 0.728q	tonne	0.0728	₹ 110.94	₹ 8.08
	LABOUR:				
0215	Fitter	Day	0.20	₹ 380.00	₹ 76.00
0212	Coolie	Day	0.20	₹ 300.00	₹ 60.00
					₹ 6,424.08
	Add for special slotted cover blocks to provide required cover to RSJ and also to keep the expanded metal in proper position	@	5.00%		₹ 321.20
					₹ 6,745.28
	Add for Sundries and contingencies	@	3%		₹ 202.36
					₹ 6,947.64
	Add for water charges	@	1%		₹ 69.48
					₹ 7,017.12
	Add for contractor's profit and overheads	@	15%		₹ 1,052.57
	Cost of providing and fixing 19.20sqm expanded metal				₹ 8,069.69
	Cost per sqm				₹ 420.30
	Rate per sqm	Say			₹ 420.30

5.15	Providing, hoisting and fixing upto floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centring, shuttering, finishing smooth with 6mm thick cement plaster 1:3 (1cement : 3 fine sand) on exposed surfaces complete, but excluding cost of reinforcement with cement concrete 1:2:4 (1cement : 2 fine sand : 4 graded stone aggregate 20mm nominal size).				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider RCC bands 40 Nos. of size 1.20 x 0.25 x 0.15 giving a total concrete quantity of 1.80 cum.				
	(A) For pre-casting and fixing RCC bands.				
	MATERIALS				
	For concreting				
04006	Stone aggregate 20mm	cum	1.70	₹ 3,969.00	₹ 6,747.30
02003	Fine sand	cum	0.85	₹ 370.00	₹ 314.50
03001	Cement	tonne	0.576	₹ 6,100.00	₹ 3,513.60
	For fixing & finishing				
02003	Fine sand	cum	0.230	₹ 370.00	₹ 85.10
03001	Cement	tonne	0.108	₹ 6,100.00	₹ 658.80
	CARRIAGE				
0405	Stone aggregate	cum	1.70	₹ 159.75	₹ 271.58
0425	Fine sand	cum	1.08	₹ 142.63	₹ 154.04
0421	Cement	tonne	0.684	₹ 110.94	₹ 75.88
	LABOUR:				
	For casting on ground & finishing				
0216	Foreman	Day	0.18	₹ 425.00	₹ 76.50
0218*	Mason	Day	0.75	₹ 400.00	₹ 300.00
0203	Beldar (M)	Day	2.35	₹ 300.00	₹ 705.00
0212	Coolie (F)	Day	2.35	₹ 300.00	₹ 705.00
0205	Bhishti/Waterman	Day	0.180	₹ 300.00	₹ 54.00
	For hoisting & fixing				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0218*	Mason	Day	0.75	₹ 400.00	₹ 300.00
0203	Beldar (M)	Day	2.75	₹ 300.00	₹ 825.00
0212	Coolie (F)	Day	2.75	₹ 300.00	₹ 825.00
0205	Bhishti/Waterman	Day	0.150	₹ 300.00	₹ 45.00
					₹ 15,720.05

	(B) For manufacturing the mould constructing platform and curing tanks				
	(a) Mould with M.S. sheet Mould Proper: Materials for one mould: Note: (We can cast 4 moulds in a day thus the casting can be done within 10 days with one mould).				
05041	(i) 14 gauge M.S. sheets 2x1.20x0.15=0.36 sqm 2x0.30x0.15=0.09 sqm Total = 0.45 sqm@15.7 kg/sqm=7.07 kg=0.07 q	q	0.07	₹ 4,532.00	₹ 317.24
05056	(ii) Angle iron 25x25x3 mm Man shutters Horizontals: 2x2x1.20=4.8 m Cross angles (Verticals): 2x5x0.15=1.5m Total = 6.30 m @1.1 kg/m=6.93 kg = 0.07 q	q	0.07	₹ 4,267.00	₹ 298.69
05026	(iii) 25x3 mm flats: 2x2x0.30=1.20 m 2x2x0.15=0.60 m Total= 1.80 m @0.594 kg/m=1.069 kg or 0.01 q	q	0.01	₹ 3,992.00	₹ 39.92
0468	Carriage	tonne	0.015	₹ 110.94	₹ 1.66
MR	Fabrication charge	q	0.150	₹ 850.00	₹ 127.50
					₹ 785.01
	Considering that these items can be used 180 times. Thus cost of using once=				₹ 4.36
	Considering the salvage value as 25% Net cost =	75%	of	₹ 4.36	₹ 3.27
05017	Bolts & Nuts: (i) 10 mm Φ - 25 mm long bolts to ix end shutters with main shutters. 2x4 Nos. = 8 Nos Add for wastage=2 Nos. Total =10 Nos.=0.0072 q (ii) 10 mm Φ - 300 mm long bolts. (Cross bolts as stiffeneers) 1x3 Nos.=3 Nos. Add for wastage=2 Nos. Total = 5 Nos.=0.0115 q	q	0.0187	₹ 6,749.00	₹ 126.21
0468	Carriage	tonne	0.00187	₹ 110.94	₹ 0.21
					₹ 126.42
	Considering that these items can be used 60 times. Thus cost of using once=				₹ 2.11
	Considering the salvage value as 25% Net cost =	75%	of	₹ 2.11	₹ 1.58
	(b) Platform for casting: Size of platform 3.50m x 2.00 m and 75 mm thick.				
	MATERIALS				
	(i) For 1:4:8 concrete with maximum size				
04004	Stone aggregate 40mm	cum	0.361	₹ 3,532.00	₹ 1,275.05
04006	Stone aggregate 20mm	cum	0.144	₹ 3,969.00	₹ 571.54
02003	Fine sand	cum	0.2625	₹ 370.00	₹ 97.13
03001	Cement	tonne	0.090	₹ 6,100.00	₹ 549.00
	CARRIAGE				
0404	Stone aggregate 40 mm	cum	0.361	₹ 172.74	₹ 62.36
0405	Stone aggregate 20 mm	cum	0.144	₹ 159.75	₹ 23.00

0425	Fine sand	cum	0.263	₹ 142.63	₹ 37.44
0421	Cement	tonne	0.090	₹ 110.94	₹ 9.98
	LABOUR:				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0218*	Mason	Day	0.06	₹ 400.00	₹ 24.00
0203	Beldar (M)	Day	0.35	₹ 300.00	₹ 105.00
0212	Coolie (F)	Day	0.35	₹ 300.00	₹ 105.00
0205	Bhishti/Waterman	Day	0.060	₹ 300.00	₹ 18.00
	(ii)For 12mm thick cement plaster (1:6) with floating coat of neat cement Plaster qty. = 3.50x2.00 = 7.00 sqm				
02003	Fine sand	cum	0.1060	₹ 370.00	₹ 39.22
03001	Cement	tonne	0.0406	₹ 6,100.00	₹ 247.66
	CARRIAGE				
0425	Fine sand	cum	0.106	₹ 142.63	₹ 15.12
0421	Cement	tonne	0.0406	₹ 110.94	₹ 4.50
	LABOUR:				
0218*	Mason	Day	0.70	₹ 400.00	₹ 280.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.070	₹ 300.00	₹ 21.00
	(C)Curing Tank:Size of curing tank 3.50 m x 1.25 m x 1.40 m				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.505	₹ 3,969.00	₹ 2,004.35
02003	Fine sand	cum	3.750	₹ 370.00	₹ 1,387.50
06002	Brick	Nos.	2000	₹ 6.69	₹ 13,380.00
03001	Cement	tonne	0.860	₹ 6,100.00	₹ 5,246.00
	CARRIAGE				
0405	Stone aggregate 20 mm	cum	0.505	₹ 159.75	₹ 80.67
0425	Fine sand	cum	3.750	₹ 142.63	₹ 534.86
0406	Brick	1000 Nos.	2000	₹ 332.82	₹ 665.64
0421	Cement	tonne	0.860	₹ 110.94	₹ 95.41
	LABOUR:				
0216	Foreman	Day	0.131	₹ 425.00	₹ 55.68
0218*	Mason	Day	4.500	₹ 400.00	₹ 1,800.00
0203	Beldar (M)	Day	6.150	₹ 300.00	₹ 1,845.00
0212	Coolie (F)	Day	8.650	₹ 300.00	₹ 2,595.00
0205	Bhishti/Waterman	Day	1.335	₹ 300.00	₹ 400.50
					₹ 33,794.11
	Considering that these items can be used 18 times. Thus cost of using once=				₹ 1,877.45
					₹ 17,602.35
	Add cost of hire and running charges of mixer, vibrator, water pump etc.	@	1.00%		₹ 176.02
					₹ 17,778.37
	Add for scaffolding, pulleys, hoisting arrangements, Mould oil, testing cover etc.	@	7.50%		₹ 1,333.38
					₹ 19,111.75

	Add for Sundries and contingencies	@	3%		₹ 573.35
					₹ 19,685.10
	Add for water charges	@	1%		₹ 196.85
					₹ 19,881.95
	Add for contractor's profit and overheads	@	15%		₹ 2,982.29
	Cost of 40 Nos. RCC bands for 1.80 cum cement concrete 1:2:4				₹ 22,864.24
	Cost of per cum.				₹ 12,702.36
	Rate per cum.	Say			₹ 12,702.40

5.16	Providing, hoisting and fixing upto floor five level precast reinforced cement concrete work in mouldings as in cornices, windows sills etc. including setting in cement mortar 1:3(1cement : 3 fine sand), cost of required centring, shuttering, finishing smooth with 6mm thick cement plaster 1:3 (1cement : 3 fine sand) on exposed surfaces complete, but excluding cost of reinforcement with cement concrete 1:2:4 (1cement : 2 fine sand : 4 graded stone aggregate 20mm nominal size).				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider 80 Nos. of window sills of size 1.20x0.25x0.075 with 1.80 cum cement concrete				
	(A) For pre-casting and fixing RCC window sills				
	MATERIALS				
	For concreting				
04006	Stone aggregate 20mm	cum	1.70	₹ 3,969.00	₹ 6,747.30
02003	Fine sand	cum	0.85	₹ 370.00	₹ 314.50
03001	Cement	tonne	0.576	₹ 6,100.00	₹ 3,513.60
	For fixing & finishing				
02003	Fine sand	cum	0.050	₹ 370.00	₹ 18.50
03001	Cement	tonne	0.200	₹ 6,100.00	₹ 1,220.00
	CARRIAGE				
0405	Stone aggregate	cum	1.70	₹ 159.75	₹ 271.58
0425	Fine sand	cum	0.90	₹ 142.63	₹ 128.37
0421	Cement	tonne	0.776	₹ 110.94	₹ 86.09
	LABOUR:				
	For casting on ground & finishing				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0218*	Mason	Day	1.00	₹ 400.00	₹ 400.00
0203	Beldar (M)	Day	3.00	₹ 300.00	₹ 900.00
0212	Coolie (F)	Day	3.00	₹ 300.00	₹ 900.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
	For hoisting & fixing				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0218*	Mason	Day	1.15	₹ 400.00	₹ 460.00
0203	Beldar (M)	Day	3.25	₹ 300.00	₹ 975.00
0212	Coolie (F)	Day	3.25	₹ 300.00	₹ 975.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
					₹ 17,221.19
	(B) For manufacturing the mould constructing platform and curing tanks				

	(a) Mould with M.S. sheet Mould Proper: Materials for one mould: Note: (We can cast 8 moulds in a day thus the casting can be done within 10 days with one mould).				
05041	(i) 14 gauge M.s. sheet 2x1.20x0.075=0.18 sqm 2x0.30x0.075=0.075 sqm Total 0.225 sqm@15.7kg/sqm=3.53 kgor = 0.035 q	q	0.035	₹ 4,532.00	₹ 158.62
05056	(ii)25x25x3 mm angle iron main shutters Horizontals2x2x1.20 = 4.80 m Verticals2x5x0.075 = 0.75 m Total= 5.55 m@1.1 kg/m = 6.11 kgor = 0.06 q	q	0.060	₹ 4,267.00	₹ 256.02
05026	(iii) 25x3 mm M.S. flats 2x2x0.30 = 1.20 m 2x2x0.075 = 0.30 m Total =1.50 m@0.594 kg/m = 0.89 kgor 0.009 q	q	0.009	₹ 3,992.00	₹ 35.93
0468	Carriage	tonne	0.010	₹ 110.94	₹ 1.11
MR	Fabrication charge	q	0.100	₹ 850.00	₹ 85.00
					₹ 536.68
	Considering that these items can be used 180 times. Thus cost of using once=				₹ 2.98
	Considering the salvage value as 25% Net cost =	75%	of	₹ 2.98	₹ 2.24
05017	Bolts & Nuts: (i) 10 mm Φ - 25 mm long bolts to fix end shutters with main shutters. 2x4 Nos. = 8 Nos Add for wastage=2 Nos. Total =10 Nos.=0.0072 q	q	0.0072	₹ 6,749.00	₹ 48.59
					₹ 48.59
	(b) Platform for casting:Size of platform 3.50m x 2.00 m and 75 mm thick.				
	MATERIALS				
	(i)For 1:4:8 concrete with maximum size				
04004	Stone aggregate 40mm	cum	0.361	₹ 3,532.00	₹ 1,275.05
04006	Stone aggregate 20mm	cum	0.144	₹ 3,969.00	₹ 571.54
02003	Fine sand	cum	0.2625	₹ 370.00	₹ 97.13
03001	Cement	tonne	0.090	₹ 6,100.00	₹ 549.00
	CARRIAGE				
0404	Stone aggregate 40 mm	cum	0.361	₹ 172.74	₹ 62.36
0405	Stone aggregate 20 mm	cum	0.144	₹ 159.75	₹ 23.00
0425	Fine sand	cum	0.263	₹ 142.63	₹ 37.44
0421	Cement	tonne	0.090	₹ 110.94	₹ 9.98
	LABOUR:				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0218*	Mason	Day	0.06	₹ 400.00	₹ 24.00
0203	Beldar (M)	Day	0.35	₹ 300.00	₹ 105.00
0212	Coolie (F)	Day	0.35	₹ 300.00	₹ 105.00
0205	Bhishti/Waterman	Day	0.060	₹ 300.00	₹ 18.00

	(ii)For 12mm thick cement plaster (1:6) with floating coat of neat cement Plaster qty. = 3.50x2.00 = 7.00 sqm				
02003	Fine sand	cum	0.1060	₹ 370.00	₹ 39.22
03001	Cement	tonne	0.0406	₹ 6,100.00	₹ 247.66
	CARRIAGE				
0425	Fine sand	cum	0.106	₹ 142.63	₹ 15.12
0421	Cement	tonne	0.0406	₹ 110.94	₹ 4.50
	LABOUR:				
0218*	Mason	Day	0.70	₹ 400.00	₹ 280.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.070	₹ 300.00	₹ 21.00
	(C)Curing Tank:Size of curing tank 3.50 m x 1.25 m x 1.40 m				
	MATERIALS				
04006	Stone aggregate 20mm	cum	0.505	₹ 3,969.00	₹ 2,004.35
02003	Fine sand	cum	3.750	₹ 370.00	₹ 1,387.50
06002	Brick	Nos.	2000	₹ 6.69	₹ 13,380.00
03001	Cement	tonne	0.860	₹ 6,100.00	₹ 5,246.00
	CARRIAGE				
0405	Stone aggregate 20 mm	cum	0.505	₹ 159.75	₹ 80.67
0425	Fine sand	cum	3.750	₹ 142.63	₹ 534.86
0406	Brick	1000 Nos.	2000	₹ 332.82	₹ 665.64
0421	Cement	tonne	0.860	₹ 110.94	₹ 95.41
	LABOUR:				
0216	Foreman	Day	0.131	₹ 425.00	₹ 55.68
0218*	Mason	Day	4.500	₹ 400.00	₹ 1,800.00
0203	Beldar (M)	Day	6.150	₹ 300.00	₹ 1,845.00
0212	Coolie (F)	Day	8.650	₹ 300.00	₹ 2,595.00
0205	Bhishti/Waterman	Day	1.335	₹ 300.00	₹ 400.50
					₹ 33,794.11
	Considering that these items can be used 18 times. Thus cost of using once=				₹ 1,877.45
					₹ 19,149.47
	Add cost of hire and running charges of mixer, vibrator, water pump etc.	@	1.00%		₹ 191.49
					₹ 19,340.96
	Add for scaffolding, pulleys, hoisting arrangements, Mould oil, testing cover etc.	@	7.50%		₹ 1,450.57
					₹ 20,791.53
	Add for Sundries and contingencies	@	3%		₹ 623.75
					₹ 21,415.28
	Add for water charges	@	1%		₹ 214.15
					₹ 21,629.43
	Add for contractor's profit and overheads	@	15%		₹ 3,244.41
	Cost of 80 Nos. RCC window sills for 1.80 cum cement concrete 1:2:4				₹ 24,873.84
	Cost of per cum.				₹ 13,818.80

	Rate per cum.	Say			₹ 13,818.80

5.17	Providing, hoisting and fixing upto floor five level precast reinforced cement concrete work in shelves including setting in cement mortar 1:3(1cement : 3 fine sand), cost of required centring, shuttering, finishing with neat cement punning on exposed surfaces complete, but excluding cost of reinforcement with cement concrete 1:2:4 (1cement : 2 fine sand : 4 graded stone aggregate 20mm nominal size).				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider 80 number of shelves of length = 600 mm Breadth = 525 mm with a overhand of 300 mm Thickness = 40 mm Quantity of concrete for 80 units $80 \times 0.60 \times 0.525 \times 0.04 = 1.008$ or say 1.00 cum				
	(A) For pre-casting and fixing RCC Shelves				
	MATERIALS				
	For concreting				
04006	Stone aggregate 20mm & 12 mm	cum	0.940	₹ 3,969.00	₹ 3,730.86
02003	Fine sand	cum	0.470	₹ 370.00	₹ 173.90
03001	Cement	tonne	0.320	₹ 6,100.00	₹ 1,952.00
	For fixing & finishing				
02003	Fine sand	cum	0.580	₹ 370.00	₹ 214.60
03001	Cement	tonne	0.275	₹ 6,100.00	₹ 1,677.50
	CARRIAGE				
0405	Stone aggregate	cum	0.94	₹ 159.75	₹ 150.17
0425	Fine sand	cum	1.05	₹ 142.63	₹ 149.76
0421	Cement	tonne	0.595	₹ 110.94	₹ 66.01
					₹ 8,114.80
	(B) For manufacturing the mould constructing platform and curing tanks				
	(a) Mould with angle iron & flats Materials for one mould:				
05056	(i)40x40x5 mm angle iron $2 \times 0.70 = 1.40$ m@3.50 kg/m=4.9 kg Say = 5.00 kg or = 0.05 q	q	0.050	₹ 4,267.00	₹ 213.35
05026	(ii)40x5 mm M.S. flats 2×0.60 m = 1.20m $= 1.20 \times 1.57$ kg/m=1.88 kg or 2.00 kg say = 0.02 q	q	0.020	₹ 3,992.00	₹ 79.84
0468	Carriage	tonne	0.007	₹ 110.94	₹ 0.78
MR	Fabrication charge	q	0.070	₹ 850.00	₹ 59.50
					₹ 353.47
	Considering that these items can be used 200 times. Thus cost of using once=				₹ 1.77
	Considering the salvage value as 25% Net cost =	75%	of	₹ 2.98	₹ 2.24
05017	Bolts & Nuts: (i) Bolts and Nuts 10 mm Φ - 30 mm long bolts $2 \times 4 = 8$ nos.	q	0.0072	₹ 6,749.00	₹ 48.59
					₹ 48.59
	(b) Platform for casting:Size of platform 3.50m x 2.00 m and 75 mm thick.				
	MATERIALS				
	(i)For 1:4:8 concrete with maximum size				

04004	Stone aggregate 40mm	cum	0.361	₹ 3,532.00	₹ 1,275.05
04006	Stone aggregate 20mm	cum	0.144	₹ 3,969.00	₹ 571.54
02003	Fine sand	cum	0.2625	₹ 370.00	₹ 97.13
03001	Cement	tonne	0.090	₹ 6,100.00	₹ 549.00
	CARRIAGE				
0404	Stone aggregate 40 mm	cum	0.361	₹ 172.74	₹ 62.36
0405	Stone aggregate 20 mm	cum	0.144	₹ 159.75	₹ 23.00
0425	Fine sand	cum	0.263	₹ 142.63	₹ 37.44
0421	Cement	tonne	0.090	₹ 110.94	₹ 9.98
	LABOUR:				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0218*	Mason	Day	0.06	₹ 400.00	₹ 24.00
0203	Beldar (M)	Day	0.35	₹ 300.00	₹ 105.00
0212	Coolie (F)	Day	0.35	₹ 300.00	₹ 105.00
0205	Bhishti/Waterman	Day	0.060	₹ 300.00	₹ 18.00
	(ii)For 12mm thick cement plaster (1:6) with floating coat of neat cement Plaster qty. = 3.50x2.00 = 7.00 sqm				
02003	Fine sand	cum	0.1060	₹ 370.00	₹ 39.22
03001	Cement	tonne	0.0406	₹ 6,100.00	₹ 247.66
	CARRIAGE				
0425	Fine sand	cum	0.106	₹ 142.63	₹ 15.12
0421	Cement	tonne	0.0406	₹ 110.94	₹ 4.50
	LABOUR:				
0218*	Mason	Day	0.70	₹ 400.00	₹ 280.00
0212	Coolie (F)	Day	0.70	₹ 300.00	₹ 210.00
0205	Bhishti/Waterman	Day	0.070	₹ 300.00	₹ 21.00
					₹ 3,703.50
	Cost of platform of size 6.00x4.00m = 24.00 sqm				₹ 12,697.71
	Considering that these items can be used 18 times. Thus cost of using once=				₹ 705.43
	CURING				
05033	Hessian cloth to cover the shelves 1x6.0x4.0 = 24 sqm	sqm	24.00	₹ 28.00	₹ 672.00
	LABOUR:				
0212	Coolie (F)	Day	1.20	₹ 300.00	₹ 360.00
					₹ 1,032.00
04010	i) 100 mm Φ balliles = 20 x 2.5 = 50.00 m (ii) 80 mm Φ ballies 20 x 2 x 1.00 = 40.00 m (iii) 75 x50 mm rafters 1 x 50.00 = 50.00 m	m	140.00	₹ 59.00	₹ 8,260.00
0473	Carriage of timber	cum	0.2500	₹ 80.65	₹ 20.16
					₹ 8,280.16
	Considering that it can be used 50 times. Thus cost of using once=				₹ 165.60
	LABOUR:				
	For casting the mould & fixing				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0218*	Mason	Day	1.25	₹ 400.00	₹ 500.00
0203	Beldar (M)	Day	2.50	₹ 300.00	₹ 750.00
0212	Coolie (F)	Day	2.50	₹ 300.00	₹ 750.00

0205	Bhishti/Waterman	Day	0.250	₹ 300.00	₹ 75.00
	For fixing				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0218*	Mason	Day	1.00	₹ 400.00	₹ 400.00
0203	Beldar (M)	Day	1.50	₹ 300.00	₹ 450.00
0212	Coolie (F)	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhishti/Waterman	Day	0.200	₹ 300.00	₹ 60.00
	For erection and removal				
0208*	Carpenter	Day	0.50	₹ 400.00	₹ 200.00
0212	Coolie (F)	Day	0.50	₹ 300.00	₹ 150.00
					₹ 14,044.91
	Add cost of hire and running charges of mixer, water pump etc.	@	1.00%		₹ 140.45
					₹ 14,185.36
	Add for scaffolding, hoisting arrangements, Mould oil, testing cover etc.	@	2.00%		₹ 283.71
					₹ 14,469.07
	Add for Sundries and contingencies	@	3%		₹ 434.07
					₹ 14,903.14
	Add for water charges	@	1%		₹ 149.03
					₹ 15,052.17
	Add for contractor's profit and overheads	@	15%		₹ 2,257.83
	Cost of 80 Nos. shelves for 1.00 cum cement concrete 1:2:4				₹ 17,310.00
	Rate per cum.	Say			₹ 17,310.00

5.18	Providing, hoisting and fixing upto floor five level precast reinforced cement concrete work in vertical & horizontal fins individually or forming box louvers including setting in cement mortar 1:2(1cement : 2 fine sand), cost of required centring, shuttering, finishing smooth with 6mm thick cement plaster 1:3(1cement : 3 fine sand) on exposed surfaces complete, but excluding cost of reinforcement with cement concrete 1:2:4 (1cement : 2 fine sand : 4 graded stone aggregate 20mm nominal size).				

Code	Description	Unit	Quantity	Rate	Amount
	The quantity of concrete involved in one set $4 \times 4.0 \times 0.60 \times 0.05 = 0.48 \text{ cum}$ $3 \times 2 \times 0.95 \times 0.60 \times 0.05 = 0.17 \text{ cum}$ Total = 0.65 cum Refer to the Fig. in Item no.5.8 which gives the clear idea of the work in question. This is a unit produced out of pre-cast members i.e. 4 Nos. 4 m verticals and 6 Nos. 1 m long horizontals erected in position 600 mm away from the face of the wall.				
	(A) For pre-casting RCC Fins				
	MATERIALS				
	For concreting				
04006	Stone aggregate 20mm	cum	0.620	₹ 3,969.00	₹ 2,460.78
02003	Fine sand	cum	0.310	₹ 370.00	₹ 114.70
03001	Cement	tonne	0.211	₹ 6,100.00	₹ 1,287.10
	For fixing				
02003	Fine sand	cum	0.0525	₹ 370.00	₹ 19.43
03001	Cement	tonne	0.025	₹ 6,100.00	₹ 152.50
	CARRIAGE				
0405	Stone aggregate	cum	0.6200	₹ 159.75	₹ 99.05
0425	Fine sand	cum	0.3625	₹ 142.63	₹ 51.70
0421	Cement	tonne	0.2360	₹ 110.94	₹ 26.18
					₹ 4,211.44
	(B) For manufacturing the mould				
	The fins are to be pre-cast in a mould prepared out of channels ISSC 125 of size 50 x 3 mm Two sets of forms are prepared one of size 4.00 x 0.60 m and the other of size 1.00 m x 0.60 m				
05056	(i) Channels 50 mm deep $2 \times 4.00 = 8.00 \text{ m}$ $2 \times 1.70 = 1.40 \text{ m}$ For Horizontal members $2 \times 1.00 = 2.00 \text{ m}$ $2 \times 0.70 = 1.40 \text{ m}$ Total = 12.80 m Add for wastage = 0.20 m Total = 13.00 m @ 7.9 kg/m = 102.7 kg = 1.027 q	q	1.027	₹ 4,267.00	₹ 4,382.21
05026	(ii) Flats 50 mm x 3 mm These are welded to the ends of channels to fix the bolts for vertical fins $4 \times 0.05 = 0.20 \text{ m}$ Horizontal fins $4 \times 0.05 = 0.20 \text{ m}$ Total = 0.40 m @ 1.2 kg/m = 0.48 kg = 0.005 q	q	0.005	₹ 3,992.00	₹ 19.96

05017	Bolts & Nuts: 10 mm diameter - 30 mm long bolts and nuts Vertical ribs: 1 x 4 = 4 Nos. Horizontal ribs: 1 x 4 = 8 Nos. Total = 8 Nos. Add for wastage=2 Nos. Total = 10 Nos.@0.076 kgs/No. = 0.76 kg = 0.0076 q	q	0.0076	₹ 6,749.00	₹ 51.29
0468	Carriage	tonne	0.104	₹ 110.94	₹ 11.54
MR	Fabrication charge	q	1.040	₹ 850.00	₹ 884.00
					₹ 5,349.00
	Considering that these items can be used 90 times. Thus cost of using once=				₹ 59.43
	Considering the salvage value as 25% Net cost =	75%	of	₹ 59.43	₹ 44.57
	(b) Platform for casting: These are light members and need not require a strong platform. Also the members can be removed from the platform after 3 days of casting hence a small platform to just cast one form at a time with cement concrete 1:5:10-75 mm thick with brick aggregates, finished top in C.M 1:4, 12 mm thick with a floating coat of neat cement can be considered. A platform of size: 4.50 m x 1.50 m is sufficient Materials for the construction of a platform				
	MATERIALS				
	(i) For 1:5:10 concrete with maximum size				
04001	Brick aggregate 40mm	cum	0.470	₹ 2,550.00	₹ 1,198.50
02003	Fine sand	cum	0.2400	₹ 370.00	₹ 88.80
03001	Cement	tonne	0.066	₹ 6,100.00	₹ 402.60
	(ii) For plaster in C.M. 1:4 with floating coat of neat cement				
02003	Fine sand	cum	0.9900	₹ 370.00	₹ 366.30
03001	Cement	tonne	0.049	₹ 6,100.00	₹ 298.90
	CARRIAGE				
0404	Brick aggregate 40 mm	cum	0.470	₹ 172.74	₹ 81.19
0425	Fine sand	cum	1.230	₹ 142.63	₹ 175.43
0421	Cement	tonne	0.115	₹ 110.94	₹ 12.76
	LABOUR:				
0218*	Mason	Day	0.25	₹ 400.00	₹ 100.00
0203	Beldar (M)	Day	0.25	₹ 300.00	₹ 75.00
	Though on this platform even 40 sets can be cast it is unlikely that in a project of medium size 40 sets may be needed. if the sets are more the cost of platform can be divided by the number of possible repetitions. Any way we are considering the cost for 20 sets of 0.65 cum concrete				₹ 2,799.48
	Thus cost of using for 1 set of 0.65 cum concrete=				₹ 139.97

	CURING ARRANGEMENT: These are very light members. They are cast almost without using a vibrator. Hence these items need a perfect curing. The best method is to put the members in water on third day. A water tank should be constructed as shown in Fig. no.4.18 by excavating a pit with sloping sides and lay 1:5:10 brick concrete and plaster the surface with neat cement plaster. This tank can be later used for curing the concrete cubes. Sizes of tank: Length of top = 5.30 m Length at bottom = 4.50 m Width at top = 1.80 m Width at bottom = 1.00 sqm Depth = 0.80 m				
	(i) Excavation in ordinary soil $= \frac{1}{2} \times [(5.50 \times 2.00) + (4.70 \times 1.20)] \times 0.875 = 7.28$ cum				
	(ii) 1:5:10 cement concrete with 40 mm brick aggregate Bottom of tank : $1 \times 4.70 \times 1.20 \times 0.075 = 0.423$ cum Sloping side: $2 \times \frac{1}{2} \times [(5.50 + 4.70)] \times 0.85 \times 0.075 = 0.65$ cum				
	(iii) 12 mm thick cement plaster in C.M. 1:4 with a floating coat of neat cement $1 \times 4.5 \times 1.00 = 4.50$ sqm $2 \times \frac{1}{2} (5.30 + 4.50) \times 0.85 = 8.33$ sqm $2 \times \frac{1}{2} (1.80 + 1.00) \times 0.85 = 2.38$ sqm Top $2 \times 5.50 \times 0.10 = 1.10$ sqm $2 \times 1.80 \times 0.10 = 0.36$ sqm Total = 16.67 sqm				
	MATERIALS				
04001	Brick aggregate 40mm	cum	1.150	₹ 2,550.00	₹ 2,932.50
02003	Fine sand	cum	0.8500	₹ 370.00	₹ 314.50
03001	Cement	tonne	0.279	₹ 6,100.00	₹ 1,701.90
	CARRIAGE				
0404	Brick aggregate 40 mm	cum	1.150	₹ 172.74	₹ 198.65
0425	Fine sand	cum	0.850	₹ 142.63	₹ 121.24
0421	Cement	tonne	0.279	₹ 110.94	₹ 30.95
	For excavation, concrete and plaster				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0218*	Mason	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar (M)	Day	9.00	₹ 300.00	₹ 2,700.00
0212	Coolie (F)	Day	5.00	₹ 300.00	₹ 1,500.00
0205	Bhishti/Waterman	Day	1.000	₹ 300.00	₹ 300.00
	Considering that the above tank can be used 30 times for curing one set of 0.65 cum of ribs and later for curing concrete cubes etc.				₹ 10,824.74
	Cost of expenses on curing tank for one set				₹ 360.82

04010	(F) Scaffoldings: (1) Ballies required (i) 100 mm Φ ballies as Outside verticals : 3.50 m long 2x2x7 nos. = 28 nos. (ii) 100 mm Φ ballies horizontal across: inside to outside: 3.50 m long 1 x 6 x 7 nos. = 42 nos. (iii) 100 mm Φ horizontals - 3.00 m long 2 x 2 x 6 Nos. = 24 Nos. (iv) 100 mm Φ ballies below chalties 3.00 long 2 x 2 x 5 Nos. = 20 Nos. Abstract of ballies required 100 mm Φ 3.50 m long = 70 Nos. or 245.00 m 100 mm Φ 3.00 long = 24 Nos or 72.00 m 75 mm Φ 3.00 long = 20 Nos or 60.00 m (2) Chalties 3.00 long 2 x 2 x 5 Nos. = 20 Nos.	m	397.00	₹ 59.00	₹ 23,423.00
0473	Carriage of timber	cum	2.760	₹ 80.65	₹ 222.59
					₹ 23,645.59
	Considering that it can be used 50 times. Thus cost of using once=				₹ 472.91
05066	100mm to 125 mm long nails	kg	2.00	₹ 66.00	₹ 132.00
	Labour for tying & removal scaffolding				
0203	Belder	Day	10.00	₹ 300.00	₹ 3,000.00
					₹ 3,132.00
	LABOUR:				
	For casting on ground finishing				
0216	Foreman	Day	0.06	₹ 425.00	₹ 25.50
0218*	Mason	Day	0.10	₹ 400.00	₹ 40.00
0203	Beldar (M)	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (F)	Day	0.65	₹ 300.00	₹ 195.00
0205	Bhishti/Waterman	Day	0.080	₹ 300.00	₹ 24.00
	For fixing in position				
0216	Foreman	Day	0.06	₹ 425.00	₹ 25.50
0218*	Mason	Day	1.35	₹ 400.00	₹ 540.00
0203	Beldar (M)	Day	2.50	₹ 300.00	₹ 750.00
0212	Coolie (F)	Day	2.50	₹ 300.00	₹ 750.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
	Total Cost				₹ 10,921.71
	Add cost of hire and running charges of mixer, water pump etc.	@	1.00%		₹ 109.22
					₹ 11,030.93
	Add for Mould oil, testing cover, Hoisting arrangements and pulleys, ropes etc.	@	2.00%		₹ 220.62
					₹ 11,251.55
	Add for Sundries and contingencies	@	3%		₹ 337.55
					₹ 11,589.10
	Add for water charges	@	1%		₹ 115.89
					₹ 11,704.99
	Add for contractor's profit and overheads	@	15%		₹ 1,755.75
	Cost of 0.65 cum cement concrete 1:2:4				₹ 13,460.74
	Cost of per cum				₹ 20,708.83

	Rate per cum.	Say			₹ 20,708.80

5.19	Providing precast cement concrete Jali 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centring and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3(1cement : 3 fine sand) etc. complete, excluding the plastering of jambs, sills and soffits				
5.19.1	50 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider the size of jali as 2.00x1.00m giving an area equal to 2 sqm				
	MATERIALS				
05020	Precast jali	sqm	2.00	₹ 373.00	₹ 746.00
	CARRIAGE				
0454	Precast jali	cum	0.10	₹ 239.43	₹ 23.94
	LABOUR:				
	For fixing in position				
0218*	Mason	Day	0.15	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.15	₹ 300.00	₹ 45.00
0212	Coolie (F)	Day	0.15	₹ 300.00	₹ 45.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
					₹ 934.94
	Add for scaffolding, cement mortar, coir strings, nails etc.	@	4.00%		₹ 37.40
					₹ 972.34
	Add for Sundries and contingencies	@	3%		₹ 29.17
					₹ 1,001.51
	Add for water charges	@	1%		₹ 10.02
					₹ 1,011.53
	Add for contractor's profit and overheads	@	15%		₹ 151.73
	Cost of 2 sqm area of cement concrete jali 50 mm thick				₹ 1,163.26
	Cost of per sqm				₹ 581.63
	Rate per sqm	Say			₹ 581.60

5.19.2	40 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider the size of jali as 2.00x1.00m giving an area equal to 2 sqm				
	MATERIALS				
05019	Precast jali	sqm	2.00	₹ 318.00	₹ 636.00
	CARRIAGE				
0454	Precast jali	cum	0.08	₹ 239.43	₹ 19.15
	LABOUR:				
	For fixing in position				
0218*	Mason	Day	0.15	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.15	₹ 300.00	₹ 45.00
0212	Coolie (F)	Day	0.15	₹ 300.00	₹ 45.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00

					₹ 820.15
	Add for scaffolding, cement mortar, coir strings, nails etc.	@	4.00%		₹ 32.81
					₹ 852.96
	Add for Sundries and contingencies	@	3%		₹ 25.59
					₹ 878.55
	Add for water charges	@	1%		₹ 8.79
					₹ 887.34
	Add for contractor's profit and overheads	@	15%		₹ 133.10
	Cost of 2 sqm area of cement concrete jali 40 mm thick				₹ 1,020.44
	Cost of per sqm				₹ 510.22
	Rate per sqm	Say			₹ 510.20

5.19.3	25 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider the size of jali as 2.00x1.00m giving an area equal to 2 sqm				
	MATERIALS				
05018	Precast jali	sqm	2.00	₹ 234.00	₹ 468.00
	CARRIAGE				
0454	Precast jali	cum	0.050	₹ 239.43	₹ 11.97
	LABOUR:				
	For fixing in position				
0218*	Mason	Day	0.15	₹ 400.00	₹ 60.00
0203	Beldar (M)	Day	0.15	₹ 300.00	₹ 45.00
0212	Coolie (F)	Day	0.15	₹ 300.00	₹ 45.00
0205	Bhishti/Waterman	Day	0.050	₹ 300.00	₹ 15.00
					₹ 644.97
	Add for scaffolding, cement mortar, coir strings, nails etc.	@	4.00%		₹ 25.80
					₹ 670.77
	Add for Sundries and contingencies	@	3%		₹ 20.12
					₹ 690.89
	Add for water charges	@	1%		₹ 6.91
					₹ 697.80
	Add for contractor's profit and overheads	@	15%		₹ 104.67
	Cost of 2 sqm area of cement concrete jali 25 mm thick				₹ 802.47
	Cost of per sqm				₹ 401.24
	Rate per sqm	Say			₹ 401.20

5.20	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto floor five level.				
5.20.1	Mild steel and Medium\Tensile steel bars.				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
05039	Steel bars = 1.00q Add 5% for wastage = 0.05q Total = 1.05q	q	1.05	₹ 4,032.50	₹ 4,234.13
05004	Binding wire	kg	0.80	₹ 58.00	₹ 46.40
	CARRIAGE				

0468	Steel bars	tonne	0.105	₹ 110.94	₹ 11.65
	LABOUR:				
0216	Foreman	Day	0.04	₹ 425.00	₹ 17.00
0202	Bar-bender	Day	0.60	₹ 300.00	₹ 180.00
0212	Helper	Day	0.60	₹ 300.00	₹ 180.00
					₹ 4,669.18
	Add for Bar bending table, Levers, Chisels, Local lead etc. etc.	@	2.00%		₹ 93.38
					₹ 4,762.56
	Add for scaffolding, pulley, Ropes etc.	@	2.00%		₹ 95.25
					₹ 4,857.81
	Add for Sundries and contingencies	@	3%		₹ 145.73
					₹ 5,003.54
	Add for contractor's profit and overheads	@	15%		₹ 750.53
	Cost of 100 kg steel reinforcement				₹ 5,754.07
	Cost of 1 kg				₹ 57.54
	Rate per kg	Say			₹ 57.50

5.20.2	Hard drawn steel wire				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
05031	Hard drawn steel wire = 1.00q Add 5% for wastage = 0.05q Total = 1.05q	q	1.05	₹ 5,268.00	₹ 5,531.40
05004	Binding wire	kg	0.80	₹ 58.00	₹ 46.40
	CARRIAGE				
0468	Hard drawn steel wire	tonne	0.105	₹ 110.94	₹ 11.65
	LABOUR:				
0216	Foreman	Day	0.04	₹ 425.00	₹ 17.00
0202	Bar-bender	Day	0.60	₹ 300.00	₹ 180.00
0212	Helper	Day	0.60	₹ 300.00	₹ 180.00
					₹ 5,966.45
	Add for Bar bending table, Levers, Chisels, Local lead etc. etc.	@	2.00%		₹ 119.33
					₹ 6,085.78
	Add for scaffolding, pulley, Ropes etc.	@	2.00%		₹ 121.72
					₹ 6,207.50
	Add for Sundries and contingencies	@	3%		₹ 186.23
					₹ 6,393.73
	Add for contractor's profit and overheads	@	15%		₹ 959.06
	Cost of 100 kg Hard drawn steel wire				₹ 7,352.79
	Cost of kg				₹ 73.53
	Rate per kg	Say			₹ 73.50

5.20.3	Hard drawn steel wire fabric				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
05032	Hard drawn steel wire fabric 100kg/7.75kg = 12.903 sqm., wastage 5 % = 0.64 sqm Hard drawn steel wire fabric = 1.00q	sqm	13.543	₹ 535.00	₹ 7,245.51
05004	Binding wire	kg	0.80	₹ 58.00	₹ 46.40
	CARRIAGE				
0468	Hard drawn steel wire fabric	tonne	1.000	₹ 110.94	₹ 110.94
	LABOUR:				
0216	Foreman	Day	0.04	₹ 425.00	₹ 17.00
0202	Bar-bender	Day	0.60	₹ 300.00	₹ 180.00
0212	Helper	Day	0.60	₹ 300.00	₹ 180.00
					₹ 7,779.85
	Add for Bar bending table, Levers, Chisels, Local lead etc. etc.	@	2.00%		₹ 155.60
					₹ 7,935.45
	Add for scaffolding, pulley, Ropes etc.	@	2.00%		₹ 158.71
					₹ 8,094.16
	Add for Sundries and contingencies	@	3%		₹ 242.82
					₹ 8,336.98
	Add for contractor's profit and overheads	@	15%		₹ 1,250.55
	Cost of 100kg Hard drawn steel wire fabric				₹ 9,587.53
	Cost of 1 kg				₹ 95.88
	Rate per kg	Say			₹ 95.90

5.20.4	Thermo-Mechanically Treated bars/ Cold twisted deformed steel bars				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
05062	Steel bars = 1.00q Add 5% for wastage = 0.05q Total = 1.05q	q	1.050	₹ 4,102.00	₹ 4,307.10
05004	Binding wire	kg	0.80	₹ 58.00	₹ 46.40
	CARRIAGE				
0468	Steel	tonne	1.000	₹ 110.94	₹ 110.94
	LABOUR:				
0216	Foreman	Day	0.04	₹ 425.00	₹ 17.00
0202	Bar-bender	Day	0.60	₹ 300.00	₹ 180.00
0212	Helper	Day	0.60	₹ 300.00	₹ 180.00
					₹ 4,841.44
	Add for Bar bending table, Levers, Chisels, Local lead etc. etc.	@	2.00%		₹ 96.83
					₹ 4,938.27
	Add for scaffolding, pulley, Ropes etc.	@	2.00%		₹ 98.77
					₹ 5,037.04
	Add for Sundries and contingencies	@	3%		₹ 151.11
					₹ 5,188.15
	Add for contractor's profit and overheads	@	15%		₹ 778.22

	Cost of 100 kg steel reinforcement				₹ 5,966.37
	Cost of 1 kg				₹ 59.66
	Rate per kg	Say			₹ 59.70

5.21	Extra for reinforcement for R.C.C. work above floor V level for each four floors or part thereof.				
Code	Discription	Unit	Quantity	Rate	Amount
	LABOUR:				
0202	Bar-bender	Day	0.75	₹ 300.00	₹ 225.00
0212	Helper	Day	0.75	₹ 300.00	₹ 225.00
					₹ 450.00
	Add for scaffolding, pulley, Ropes etc.	@	2%		₹ 9.00
					₹ 459.00
	Add for Sundries and contingencies	@	3%		₹ 13.77
					₹ 472.77
	Add for contractor's profit and overheads	@	15%		₹ 70.92
	Cost of 100 kg steel reinforcement				₹ 543.69
	Cost of 1 kg				₹ 5.44
	Rate per kg	Say			₹ 5.40

5.22	Extra for laying reinforced cement concrete in or under water and/ or liquid mud including cost of pumping or bailing out water and removing slush etc., complete.				
	<i>Note: The quantity will be calculated by multiplying the depth measured from the sub-soil water level up to the centre of gravity of the RCC under sub-soil water with the quantity of RCC in cubic meter executed under sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m and 0.05m shall be taken as 0.1m and less than 0.05m ignored. No extra payment shall be made for placing reinforcement or centering and shuttering under sub-soil water conditions. [unit of measuement = per cum per meter depth]</i>				
5.22.1	Reinforced cement concrete for R.C.C. footing				
	Consider the column pit shown in Fig. Item No. 4.5.5 of CC work. Dewatered to lay the concrete for the footing Bottom straight portion = 3.267 cum Sloped portion of footing = 5.20 cum Total = 8.467 cum				
	Qty. of dewatering with pumps of pumping capacity 3.50 kilolitres per hour or 3500 litres per hour = $4.50 \times 4.50 \times 4.85 = 98.21$ cum = 98000 litres. Period required for pumping 98000 litres of water = $98000/35000 = 28$ hours. Add 4 hours extra for keeping pump in operation for doing formwark, tying reinforcements and concreting Total pumping time = $28+4 = 32$ hours = 4 shifts				
0117	Total pumping period	shift	4	₹ 850.00	₹ 3,400.00
	LABOUR:				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar (M)	Day	3.00	₹ 300.00	₹ 900.00
					₹ 4,725.00
	Add for carriage of pumps, cost of buckets, ropes etc.	@	6.00%		₹ 283.50
					₹ 5,008.50
	Add for Sundries and contingencies	@	3%		₹ 150.26

					₹ 5,158.76
	Add for water charges	@	1%		₹ 51.59
					₹ 5,210.35
	Add for contractor's profit and overheads	@	15%		₹ 781.55
	Extra cost of pumping water for laying 8.467 cum RCC at 4.85 depth				₹ 5,991.90
	Extra rate per cum/meter depth				₹ 145.91
		Say			₹ 145.90

5.22.2	Reinforced cement concrete for R.C.C. Column				
	Consider the column pit shown in Fig. Item No. 4.5.5 of CC work. Dewatered to lay the concrete for RCC column over RCC footing Total = 0.68 cum at 3.35 m depth				
	Qty. of dewatering with pumps of pumping capacity 3.50 kilolitres per hour or 3500 litres per hour = $4.50 \times 4.50 \times 4.15 = 84.04$ cum = 84000 litres. Period required for pumping 98000 litres of water = $84000/35000 = 24$ hours. Add 4 hours extra for keeping pump in operation for doing formwork, tying reinforcements and concreting Total pumping time = $24+4 = 28$ hours = 3.5 shifts				
0117	Total pumping period	shift	3.5	₹ 850.00	₹ 2,975.00
	LABOUR:				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar (M)	Day	2.00	₹ 300.00	₹ 600.00
					₹ 4,000.00
	Add for carriage of pumps, cost of buckets, ropes etc.	@	6.00%		₹ 240.00
					₹ 4,240.00
	Add for Sundries and contingencies	@	3%		₹ 127.20
					₹ 4,367.20
	Add for water charges	@	1%		₹ 43.67
					₹ 4,410.87
	Add for contractor's profit and overheads	@	15%		₹ 661.63
	Extra cost of pumping water for laying 0.68 cum RCC at 3.35m depth				₹ 5,072.50
	Extra rate per cum/meter depth				₹ 2,226.73
		Say			₹ 2,226.70

5.23	Extra for laying reinforced cement concrete in or under foul positions.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	EXTRA LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0218*	Mason	Day	0.30	₹ 400.00	₹ 120.00
0203	Beldar (M)	Day	0.85	₹ 300.00	₹ 255.00
0212	Coolie (F)	Day	0.85	₹ 300.00	₹ 255.00
					₹ 693.75
	Add for buckets, ropes etc.	@	5.00%		₹ 34.69
					₹ 728.44
	Add for Sundries and contingencies	@	3%		₹ 21.85
					₹ 750.29
	Add for water charges	@	1%		₹ 7.50

					₹ 757.79
	Add for contractor's profit and overheads	@	15%		₹ 113.67
	Cost of 1 cum of concrete to be executed under foul				₹ 871.46
	Rate per cum				₹ 871.50

5.24	Smooth finishing of the exposed surface of R.C.C. work with 6mm thick cement mortar 1:3 (1 Cement: 3 fine sand)				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider an area of 5mx3m of cement concrete surface over which the 6 mm thick finishing is done = 5.0x3.0= 15 sqm				
	MATERIALS				
	Cement mortar 1 : 3 (1 cement : 3 fine sand)	cum	0.108	₹ 3,992.09	₹ 431.15
	LABOUR				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0218*	Mason	Day	1.13	₹ 400.00	₹ 450.00
0212	Coolie (F)	Day	2.25	₹ 300.00	₹ 675.00
0205	Bhishti/Waterman	Day	0.150	₹ 300.00	₹ 45.00
					₹ 1,643.65
	Add for Bar scaffolding, pumps for water etc.	@	3.00%		₹ 49.31
					₹ 1,737.96
	Add for hacking with sharp tool, removing bars cleaning surface with wire brushes	@	5.00%		₹ 86.90
					₹ 1,824.86
	Add for Sundries and contingencies	@	3%		₹ 54.75
					₹ 1,879.61
	Add for contractor's profit and overheads	@	15%		₹ 281.94
	Cost of 15 sqm smooth finishing 6 mm thick not executed hence to be omitted				₹ 2,161.55
	Cost of 1 sqm				₹ 144.10
	Rate per sqm	Say			₹ 144.10

5.25	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.				
Code	Discription	Unit	Quantity	Rate	Amount
	Providing or omitting plaster drip course of 20m length from RCC projection. This is a peculiar item where no material will be required because the mason first plasters the surface and then cuts the grove in the plaster. At the most a small quantity of mortar that is applied would be disturbed while forming the groove which can be considered as wastage. Hence only main expenditure would be labour for forming the groove.				
	LABOUR				
0219	Mason	Day	0.65	₹ 425.00	₹ 276.25
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
					₹ 471.25
	Add for wastage of plastered material and extra mortar for touching up the groove etc.	@	10.00%		₹ 47.13
					₹ 518.38
	Add for wooden template for forming the groove	@	5.00%		₹ 25.92

					₹ 544.30
	Add for Sundries and contingencies	@	3%		₹ 16.33
					₹ 560.63
	Add for contractor's profit and overheads	@	15%		₹ 84.09
	Cost of cutting groove for 20m length				₹ 644.72
	Cost per meter				₹ 32.24
	Rate per m	Say			₹ 32.20

5.26	Providing and fixing in position copper plate as per design for expansion joints.				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering a copper plate of length 3.50m and width 200 mm and of thickness 1.6mm. Hence, area of copper plate = $3.50 \times 0.20 = 0.7$ sqm@14.08 kg/sqm = 9.856 kg				
	MATERIALS				
05021	Copper plate 200mm wide	kg	9.856	₹ 322.00	₹ 3,173.63
05050	Rawl plug and screws with oval shaped slot and washers 2x12 = 24 Nos.	each	24	₹ 7.00	₹ 168.00
	LABOUR For drilling holes and fixing with rawl plug and screws				
0215	Fitter	Day	0.25	₹ 380.00	₹ 95.00
0212	Coolie (F)	Day	0.10	₹ 300.00	₹ 30.00
					₹ 3,466.63
	Add for hire charges of Drilling machine	@	5.00%		₹ 173.33
					₹ 3,639.96
	Add for Sundries and contingencies	@	3%		₹ 109.20
					₹ 3,749.16
	Add for contractor's profit and overheads	@	15%		₹ 562.37
	Cost of 9.86 kg copper plate 200mm wide				₹ 4,311.53
	Cost per kg				₹ 437.27
	Rate per kg	Say			₹ 437.30

5.27	Providing and filling in position, blown bitumen in expansion joints.				
Code	Discription	Unit	Quantity	Rate	Amount
	Let the thickness of floor be 125 mm and the width of joint be 20mm No. of joints under consideration = 5 Nos. of 20 m length each. The unit of measurements is Per cm width Per cm Depth Per 100m length Qty. of work involved = 2cm width x 12.5cm depth and 5x20.0 = 100m length				
	MATERIALS				
05006	Blown Bitumen = 100x0.02x0.125 = 0.25 cum@ 1050kg/cum = 262.5kg = 2.625q	tonne	0.2625	₹ 36,820.00	₹ 9,665.25
04012	Steam coal for heating = 2q per tonne of bitumin = 2x0.2625 = 0.525q	q	0.525	₹ 890.00	₹ 467.25
	CARRIAGE				
0472	Blown Bitumen	tonne	0.2625	₹ 110.94	₹ 29.12
0467	Steam coal	tonne	0.0525	₹ 110.94	₹ 5.82
	LABOUR				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0203	Belder	Day	6.00	₹ 300.00	₹ 1,800.00
					₹ 12,073.69
	Add for cleaning joints etc.	@	2.00%		₹ 241.47
					₹ 12,315.16
	Add for Sundries and contingencies	@	3%		₹ 369.45
					₹ 12,684.61
	Add for contractor's profit and overheads	@	15%		₹ 1,902.69
	Cost of filling 2 cm wide, 12.5 cm deep and 100m long expansion joint with blown bitumen				₹ 14,587.30
	Cost Per cm width Per cm Depth Per 100m length				₹ 583.49
	Rate Per cm width Per cm Depth Per 100m length	Say			₹ 583.50

5.28	Providing and filling in position bitumen mix filler of proportion 80 kg. of hot bitumen, 1 kg. of cement and 0.25 cubic metre of coarse sand for expansion joints.				
Code	Discription	Unit	Quantity	Rate	Amount
	Let the thickness of floor be 125 mm and the width of joint be 12mm No. of joints under consideration = 5 Nos. of 20 m length. The unit of measurements is Per cm width Per cm Depth Per 100m length Qty. of work involved = 1.2cm width x 12cm depth and 5x20.0 = 100m length				

	MATERIALS				
04011	Qty. of bitumen mix filler to be filled = 1x100.0x0.012x0.12 = 0.144 cum @80kg = 11.52 kg = 0.115 q	tonne	0.0115	₹ 36,820.00	₹ 423.43
04012	Steam coal for heating = 2q per tonne of bitumin = 2x0.0115 = 0.023q	q	0.023	₹ 890.00	₹ 20.47
03001	Cement= 0.144x1kg = 0.144 kg	tonne	0.000144	₹ 6,100.00	₹ 0.88
02003	Fine sand = 0.25x0.144 = 0.036 cum	cum	0.0360	₹ 370.00	₹ 13.32
	CARRIAGE				
0472	Bitumen	tonne	0.0115	₹ 110.94	₹ 1.28
0467	Steam coal	tonne	0.0023	₹ 110.94	₹ 0.26
0421	Cement	tonne	0.000144	₹ 110.94	₹ 0.02
0425	Fine sand	cum	0.0360	₹ 142.63	₹ 5.13
	LABOUR				
0216	Foreman	Day	0.80	₹ 425.00	₹ 340.00
0203	Belder	Day	4.80	₹ 300.00	₹ 1,440.00
					₹ 2,244.79
	Add for cleaning joints etc.	@	2.00%		₹ 44.90
					₹ 2,289.69
	Add for Sundries and contingencies	@	3%		₹ 68.69
					₹ 2,358.38
	Add for contractor's profit and overheads	@	15%		₹ 353.76
	Cost of filling 1.2 cm wide, 12 cm deep and 100m long expansion joint with bitumen filler				₹ 2,712.14
	Cost Per cm width Per cm Depth Per 100m length				₹ 188.34
	Rate Per cm width Per cm Depth Per 100m length	Say			₹ 188.30

5.29	Providing and fixing in position 12mm thick bitumen impregnated fibre board conforming to IS: 1838 including cost of primer, sealing compound in expansion joints.				
Code	Discription	Unit	Quantity	Rate	Amount
	Let the thickness of floor be 125 mm and the width of joint be 12mm No. of joints under consideration = 5 Nos. of 20 m length. The unit of measurements is Per cm width Per cm Depth Per 100m length Qty. of work involved = 1.2cm width x 12cm depth and 5x20.0 = 100m length				
	MATERIALS				
05005	Bitumen primer: Bottom : 1x100.0x0.012 = 1.20 sqm Sides: 2x100.0x0.12 = 240 Sqm Total = 25.20 sqm @ 2.6 litres/10 sqm = 6.55 litres	litre	6.55	₹ 52.00	₹ 340.60
05024	12 mm thick bitumen impregnated fibre board =1x100.0x0.12 = 12 sqm	sqm	12.00	₹ 415.00	₹ 4,980.00
	CARRIAGE				

0472	Bitumen primer	tonne	0.0115	₹ 110.94	₹ 1.28
0472	12 mm thick bitumen impregnated fibre board 12x0.012x256.3 kg/cum = 36.91 kg = 0.037t	tonne	0.0370	₹ 110.94	₹ 4.10
	LABOUR				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0203	Belder	Day	0.37	₹ 300.00	₹ 111.00
					₹ 5,479.48
	Add for cleaning joints etc.	@	2.00%		₹ 109.59
					₹ 5,589.07
	Add for Sundries and contingencies	@	3%		₹ 167.67
					₹ 5,756.74
	Add for contractor's profit and overheads	@	15%		₹ 863.51
	Cost of providing and fixing 12 mm thick bitumen impregnated fibre board for 12 cm depth and 100m length				₹ 6,620.25
	Cost of 12 mm thick bitumen impregnated fibre board per cm depth and 100 m length				₹ 551.69
	Rate of 12 mm thick bitumen impregnated fibre board per cm depth and 100 m length	Say			₹ 551.70

5.30	Providing and fixing sheet covering over expansion joints with iron screws as per design to match the colour /shade of wall treatment.				
5.30.1	Non-asbestos fibre cement board 6 mm thick as per IS: 14862 [150mm / 200mm wide]				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider a 6mm thick 200mm wide non-asbestors fibre cement board of 3.00m length to cover the joint				
	MATERIALS				
05044	6 mm thick non-asbestors fibre cement board 1x3.0x0.20 = 0.60sqm	sqm	0.60	₹ 225.00	₹ 135.00
05050	Rawl plug, 50mm iron screws with washers 2x11 = 22 Nos.	each	22	₹ 7.00	₹ 154.00
	LABOUR For drilling holes at 300mm c/c and fixing with rawl plugs and screws				
0215	Fitter	Day	0.20	₹ 380.00	₹ 76.00
0212	Helper	Day	0.20	₹ 300.00	₹ 60.00
					₹ 425.00
	Add for hire charges of drilling machine	@	5.00%		₹ 21.25
					₹ 446.25
	Add for Sundries and contingencies	@	3%		₹ 13.39
					₹ 459.64
	Add for contractor's profit and overheads	@	15%		₹ 68.95
	Cost of fixing 3.00m of 6mm thick non-asbestors fibre cement board				₹ 528.59
	Cost of fixing 1m				₹ 176.20
	Rate per meters	Say			₹ 176.20

5.30.2	Aluminium fluted strips 3.15mm thick: 200mm wide

Code	Discription	Unit	Quantity	Rate	Amount
	Consider a 3.15mm thick 200mm wide alumunium fluted strips of 3.00m length to cover the joint				
	MATERIALS				
05054	3.15mm thick alumunium fluted strips 1x3.0x0.20 = 0.60sqm	m	3.00	₹ 347.00	₹ 1,041.00
05050	Rawl plug, 50mm iron screws with washers 2x11 = 22 Nos.	each	22	₹ 7.00	₹ 154.00
	LABOUR For drilling holes at 300mm c/c and fixing with rawl plugs and screws				
0215	Fitter	Day	0.20	₹ 380.00	₹ 76.00
0212	Helper	Day	0.20	₹ 300.00	₹ 60.00
					₹ 1,331.00
	Add for hire charges of drilling machine	@	6.00%		₹ 79.86
					₹ 1,410.86
	Add for Sundries and contingencies	@	3%		₹ 42.33
					₹ 1,453.19
	Add for contractor's profit and overheads	@	15%		₹ 217.98
	Cost of fixing a 3.00m of 3.15mm thick alumunium fluted strips				₹ 1,671.17
	Cost of fixing 1m				₹ 557.06
	Rate per meter	Say			₹ 557.10

5.31	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centring, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per the direction of Engineer-in-Charge.
5.31.1	All works upto plinth level
5.31.1.1	Reinforced cement concrete grade M-25 using 410 kg of cement per cum
	The quantity of cement considered for calculation in the item no.5.31.1.1 is 410 kg/cum as prescribed in the item though the minimum cement content for the particular grade of concrete as prescribed in IS 456-2000 and also in Chapter 4 of CPWD Specification is 26.8%. The quantities of coarse and fine aggregates are considered as 68.5% and 31.5% respectively of net quantity of concrete accordingly for concrete grade M-25 for 1 cum of concrete the coarse aggregate is taken as 1195 kg and fine aggregate as 550 kg and cement for the mix as 410 kg as prescribed. These values of agregates are arrived after making a number of trial mixes on site of work kfor conducting the design mix. However, as slight incarease or decrease in all ingredients except cement is expected when the mix is designed depending upon the quality of materials available on the particulars site. Therefore the rates arrived in the item No.5.31 are all tentative and approximate and the correct rate can be worked only after getting the Design mix prepared from a reputed laboratory or an expert Design mix consultant.

The design mix concrete can be used without any elaborate machinery like batching plant and concrete pump etc.

The Design mix concrete can be executed by employing all the machinery used for ordinary concrete i.e. a concrete mixer with hopper, concrete lift or crane and vibrators. The only addition would be a suitable weigh batcher either double loading type or a single loading type, incidentally the IS : 456-2000 has permitted feeding the mixer with aggregates on volume basis after converting the weights of aggregates to volume on confirming the actual weight of aggregates per cum. Only condition is the aggregates should be measured with accurate measuring boxes and cement should never be batched by volume but only on weight basis. Only thing is the supervision should be strict. It should be specifically noted that one can save a good quality of cement and still achieve better strength of concrete by adopting the practice of design mix concrete, which has been universally accepted as most scientific method of concreting, that can be executed without using any elaborate machinery.

It should be very clearly understood that as prescribed in Chapter 4 of CPWD Specification and also IS 456-2000, the concrete Grade M-20 shall not be used for R.C.C. members exposed to the atmosphere and also for RCC members in touch with soil i.e. this Grade of concrete should not be used for RCC members situated outside the building as well as for the RCC members in foundation and for all these items only concrete Grade M-25 and higher Grades of concrete shall be used.

Note:

(i) In case the concrete is supplied through batching plant and conveyed by pumping, the additions for hire charges of mixer, vibrator shall be changed to 8% instead of 5%

(ii) Also if the concreting is done by using concrete pumps the labour component shall be changed as below:

Foreman = 0.10

Mason = 0.15

Belder = 0.30

Coolie = 0.30

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm nominal size 75% of 0.80 cum	cum	0.200	₹ 3,969.00	₹ 793.80
04007	Stone aggregate 12mm nominal size 25% of 0.80 cum	cum	0.600	₹ 4,005.00	₹ 2,403.00
02003	Fine sand	cum	0.35	₹ 370.00	₹ 129.50
03001	Cement	tonne	0.41	₹ 6,100.00	₹ 2,501.00
	CARRIAGE				
0405	Stone aggregate	cum	0.800	₹ 159.75	₹ 127.80
0425	Fine sand	cum	0.35	₹ 142.63	₹ 49.92
0421	Cement	tonne	0.41	₹ 110.94	₹ 45.49
	LABOUR:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.200	₹ 400.00	₹ 80.00
0203	Beldar (M)	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie (F)	Day	0.80	₹ 300.00	₹ 240.00
0205	Bhishti/Waterman	Day	0.100	₹ 300.00	₹ 30.00
					₹ 6,683.01
	Add for payment for mix design either to the laboratory or to consultant	@	5.0%		₹ 334.15
					₹ 7,017.16
	Add for conducting tests before starting the work to confirm the accuracy of design mix and later during the progress of work	@	2.0%		₹ 140.34
					₹ 7,157.50

	Add for Admixtures (if needed)	@	0.5%		₹ 35.79
					₹ 7,193.29
	Add cost of hire and running charges of mixer, vibrator (including stand by one), weigh-batcher, water pump, chute, ladders etc.	@	15.0%		₹ 1,078.99
					₹ 8,272.28
	Add for Sundries and contingencies	@	3%		₹ 248.17
					₹ 8,520.45
	Add for water charges	@	1%		₹ 85.20
					₹ 8,605.65
	Add for contractor's profit and overheads	@	15%		₹ 1,290.85
	Cost of providing and laying 1 cum. of reinforced cement concrete Grade M-25				₹ 9,896.50
	Rate per cum.	Say			₹ 9,896.50

5.31.2	All works upto Floor five level				
5.31.2.1	Reinforced cement concrete grade M-25 using 410 kg of cement per cum				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm nominal size 75% of 0.80 cum	cum	0.200	₹ 3,969.00	₹ 793.80
04007	Stone aggregate 12mm nominal size 25% of 0.80 cum	cum	0.600	₹ 4,005.00	₹ 2,403.00
02003	Fine sand	cum	0.35	₹ 370.00	₹ 129.50
03001	Cement	tonne	0.41	₹ 6,100.00	₹ 2,501.00
	CARRIAGE				
0405	Stone aggregate	cum	0.800	₹ 159.75	₹ 127.80
0425	Fine sand	cum	0.35	₹ 142.63	₹ 49.92
0421	Cement	tonne	0.41	₹ 110.94	₹ 45.49
	LABOUR:				
0216	Foreman	Day	0.1	₹ 425.00	₹ 42.50
0218*	Mason	Day	0.300	₹ 400.00	₹ 120.00
0203	Beldar (M)	Day	0.90	₹ 300.00	₹ 270.00
0212	Coolie (F)	Day	0.90	₹ 300.00	₹ 270.00
0205	Bhishti/Waterman	Day	0.100	₹ 300.00	₹ 30.00
					₹ 6,783.01
	Add for payment for mix design either to the laboratory or to consultant	@	5.0%		₹ 339.15
					₹ 7,122.16
	Add for conducting tests before starting the work to confirm the accuracy of design mix and later during the progress of work	@	2.0%		₹ 142.44
					₹ 7,264.60
	Add for Admixtures (if needed)	@	0.5%		₹ 36.32
					₹ 7,300.92
	Add cost of hire and running charges of mixer, vibrator (including stand by one), weigh-batcher, water pump, chute, ladders etc.	@	15.0%		₹ 1,095.14

					₹ 8,396.06
	Add for Sundries and contingencies	@	3%		₹ 251.88
					₹ 8,647.94
	Add for water charges	@	1%		₹ 86.48
					₹ 8,734.42
	Add for contractor's profit and overheads	@	15%		₹ 1,310.16
	Cost of providing and laying 1 cum. of reinforced cement concrete Grade M-25				₹ 10,044.58
	Rate per cum.	Say			₹ 10,044.60

5.32	Providing and laying in position ready mixed concrete manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead upto 10kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of RMC from transit mixer to site of laying but excluding the cost of centring, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per the direction of Engineer-in-Charge.				
5.32.1	All works upto plinth level				
5.32.1.1	Reinforced cement concrete grade M-25 using 410 kg of cement per cum				
	1. Minimum cement content: RMC supplier manufactures RMC as per the stipulations on minimum cement content in IS:456-2000 Concrete Grade M-20 = 300 kg/cum Concrete Grade M-25 = 300 kg/cum Concrete Grade M-30 = 320 kg/cum Concrete Grade M-35 = 340 kg/cum Concrete Grade M-40 = 360 kg/cum The RMC manufacturer therefore uses and guarantess the minimum cement context prescribed in the IS Code and not the arbitrary value of 410 kg/cum. However he gives the guarantee for the strength of concrete as specified by IS codes. (2) Maximum Cement Content The IS 456-2000 further stipulates that cement context not including fly ash, in excess of 450 kg/cum should not be used, unless special consideration has been given in design to the increased risk of cracking due to drying shrinkage in thin sections, or to early thermal cracking and to the increased risk of damage due to alkali silica reactions. When such is the case how far the CPWD is justifiable in proposing 410 kg/cum cement for concrete grade M-25. (3) Pumping concrete to the place of Laying The RMC supplier will be having an arrangement in this transit mixer to pump the concrete directly to the point of placing. However this facility can be availed by the client on some extra payment only if the quantity of supply is more than 7 cum. In case the quantity of supply is less than 7 cum the RMC will be unloaded on the platform and the client will have to engage separate labours to carry the concrete through a lift or crane as the case may be.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm nominal size 75% of 0.80 cum	cum	0.200	₹ 3,969.00	₹ 793.80
04007	Stone aggregate 12mm nominal size 25% of 0.80 cum	cum	0.600	₹ 4,005.00	₹ 2,403.00
02003	Fine sand	cum	0.35	₹ 370.00	₹ 129.50
03001	Cement	tonne	0.41	₹ 6,100.00	₹ 2,501.00
05046	Plasticizer 0.80% of cement	kg	3.28	₹ 41.00	₹ 134.48
	CARRIAGE				
0405	Stone aggregate	cum	0.800	₹ 159.75	₹ 127.80

0425	Fine sand	cum	0.35	₹ 142.63	₹ 49.92
0421	Cement	tonne	0.41	₹ 110.94	₹ 45.49
0124	Production cost of concrete by Batch Mixed plant	cum	1.00	₹ 450.00	₹ 450.00
0101	Carriage of concrete by transit mixer.	km/cum	10.00	₹ 42.00	₹ 420.00
0125	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	1.00	₹ 175.00	₹ 175.00
	LABOUR: Considering RMC is delivered to site and pumped up to the place of laying				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.050	₹ 400.00	₹ 20.00
0203	Beldar (M)	Day	0.10	₹ 300.00	₹ 30.00
0212	Coolie (F)	Day	0.10	₹ 300.00	₹ 30.00
					₹ 7,331.24
	Add for hire charges of vibrator etc.	@	8.0%		₹ 586.50
					₹ 7,917.74
	Add for Sundries and contingencies	@	3%		₹ 237.53
					₹ 8,155.27
	Add for water charges	@	1%		₹ 81.55
					₹ 8,236.82
	Add for contractor's profit and overheads	@	15%		₹ 1,235.52
	Cost of providing and laying 1 cum. of reinforced cement concrete Grade M-25				₹ 9,472.34
	Rate per cum.	Say			₹ 9,472.30

5.32.2	All works upto Floor five level				
5.32.2.1	Reinforced cement concrete grade M-25 using 410 kg of cement per cum				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	MATERIALS				
04006	Stone aggregate 20mm nominal size 75% of 0.80 cum	cum	0.200	₹ 3,969.00	₹ 793.80
04007	Stone aggregate 12mm nominal size 25% of 0.80 cum	cum	0.600	₹ 4,005.00	₹ 2,403.00
02003	Fine sand	cum	0.35	₹ 370.00	₹ 129.50
03001	Cement	tonne	0.41	₹ 6,100.00	₹ 2,501.00
05046	Plasticizer 0.80% of cement	kg	3.28	₹ 41.00	₹ 134.48
	CARRIAGE				
0405	Stone aggregate	cum	0.800	₹ 159.75	₹ 127.80
0425	Fine sand	cum	0.35	₹ 142.63	₹ 49.92
0421	Cement	tonne	0.41	₹ 110.94	₹ 45.49
0124	Production cost of concrete by Batch Mixed plant	cum	1.00	₹ 450.00	₹ 450.00
0101	Carriage of concrete by transit mixer.	km/cum	10.00	₹ 42.00	₹ 420.00
0125	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	1.00	₹ 175.00	₹ 175.00
	LABOUR: Considering RMC is delivered to site and pumped up to the place of laying				

0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0218*	Mason	Day	0.050	₹ 400.00	₹ 20.00
0203	Beldar (M)	Day	0.25	₹ 300.00	₹ 75.00
0212	Coolie (F)	Day	0.25	₹ 300.00	₹ 75.00
					₹ 7,421.24
	Add for hire charges of vibrator, scaffolding chalis etc.	@	10.0%		₹ 742.12
					₹ 8,163.36
	Add for Sundries and contingencies	@	3%		₹ 244.90
					₹ 8,408.26
	Add for water charges	@	1%		₹ 84.08
					₹ 8,492.34
	Add for contractor's profit and overheads	@	15%		₹ 1,273.85
	Cost of providing and laying 1 cum. of reinforced cement concrete Grade M-25				₹ 9,766.19
	Rate per cum.	Say			₹ 9,766.20

5.33	Extra for carriage of R.M.C. beyond the initial lead of 10 km.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum/km				
0101	Carriage of concrete by transit mixer.	km/cum	1.00	₹ 42.00	₹ 42.00
	Add for Sundries and contingencies	@	3%		₹ 1.26
					₹ 43.26
	Add for water charges	@	1%		₹ 0.43
					₹ 43.69
	Add for contractor's profit and overheads	@	15%		₹ 6.55
	Additional Cost for carriage of R.M.C. beyond 10 km cum/km				₹ 50.24
	Additional Rate per cum per km.	Say			₹ 50.20

5.34	Add or deduct for providing richer or leaner mixes respectively at all levels.				
5.34.1	Providing M-30 grade of concrete instead of M-25 grade of concrete B.M.C/R.M.C				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Minimum cement content for concrete Grade M-30 for RCC work = 320 kg/cum and minimum cement content for Concrete grade M-25 for RCC work = 300kg/cum Extra cement = 20kg/cum No extra labour is involved				
	MATERIALS				
03001	Cement	tonne	0.02	₹ 6,100.00	₹ 122.00
	CARRIAGE				
0421	Cement	tonne	0.02	₹ 110.94	₹ 2.22
					₹ 124.22
	Add for payment for mix design either to the laboratory or to consultant	@	5.0%		₹ 6.21
					₹ 130.43

	Add for conducting tests before starting the work to confirm the accuracy of design mix and later during the progress of work	@	2.0%		₹ 2.61
					₹ 133.04
	Add for Admixtures (if needed)	@	0.5%		₹ 0.67
					₹ 133.71
	Add cost of hire and running charges of mixer, vibrator (including stand by one), weigh-batcher, water pump, chute, ladders etc.	@	15.0%		₹ 20.06
					₹ 153.77
	Add for Sundries and contingencies	@	3%		₹ 4.61
					₹ 158.38
	Add for water charges	@	1%		₹ 1.58
					₹ 159.96
	Add for contractor's profit and overheads	@	15%		₹ 23.99
	Additional Cost for providing and laying 1 cum. of reinforced cement concrete Grade M-30 instead of Concrete Grade M-25				₹ 183.95
	Additional Rate per cum.	Say			₹ 184.00

5.34.2	Providing M-35 grade of concrete instead of M-25 grade of concrete B.M.C/R.M.C				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Minimum cement content for concrete Grade M-35 for RCC work = 340 kg/cum and minimum cement content for Concrete grade M-25 for RCC work = 300kg/cum Extra cement = 40kg/cum No extra labour is involved				
	MATERIALS				
03001	Cement	tonne	0.04	₹ 6,100.00	₹ 244.00
	CARRIAGE				
0421	Cement	tonne	0.04	₹ 110.94	₹ 4.44
					₹ 248.44
	Add for payment for mix design either to the laboratory or to consultant	@	5.0%		₹ 12.42
					₹ 260.86
	Add for conducting tests before starting the work to confirm the accuracy of design mix and later during the progress of work	@	2.0%		₹ 5.22
					₹ 266.08
	Add for Admixtures (if needed)	@	0.5%		₹ 1.33
					₹ 267.41
	Add cost of hire and running charges of mixer, vibrator (including stand by one), weigh-batcher, water pump, chute, ladders etc.	@	15.0%		₹ 40.11
					₹ 307.52
	Add for Sundries and contingencies	@	3%		₹ 9.23

					₹ 316.75
	Add for water charges	@	1%		₹ 3.17
					₹ 319.92
	Add for contractor's profit and overheads	@	15%		₹ 47.99
	Additional Cost for providing and laying 1 cum. of reinforced cement concrete Grade M-35 instead of Concrete Grade M-25				₹ 367.91
	Additional Rate per cum.	Say			₹ 367.90

5.34.3	Providing M-25 grade of concrete instead of M-20 grade of concrete B.M.C/R.M.C				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum				
	Minimum cement content for concrete Grade M-25 & M-20 for RCC work is same. Therefore no difference in the quantity of cement in the above two grades and still the extra strength is achieved by the effort and skill of the Design mix Engineer/ consultant for which normally he does not charge anything extra, there should not be any increase in rate for adopting concrete Grade M-25 instead of the concrete Grade M-20. However depending upon the circumstances, site conditions, etc. there may increase the rate of concrete grade M-25 by about ` 25.00 per cum				
	Additional Cost for providing and laying 1 cum. of reinforced cement concrete Grade M-25 instead of Concrete Grade M-20	Say			₹ 25.00

5.35	Deduct for using less cement than the quantity as provided in the item of batch mix concrete/RMC as arrived as per mix design.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost per quintal				

	MATERIALS				
03001	Cement	tonne	0.1	₹ 6,100.00	₹ 610.00
	CARRIAGE				
0421	Cement	tonne	0.1	₹ 110.94	₹ 11.09
					₹ 621.09
	Add for Sundries and contingencies	@	3%		₹ 18.63
					₹ 639.72
	Add for water charges	@	1%		₹ 6.40
					₹ 646.12
	Add for contractor's profit and overheads	@	15%		₹ 96.92
	Deduct Cost for 1 q				₹ 743.04
	Additional Rate per quintal	Say			₹ 743.00

5.36	Extra for R.C.C./ B.M.C/ R.M.C. work above floor V level for each four floors or part thereof.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost per cum				
0125	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	1.00	₹ 175.00	₹ 175.00
					₹ 175.00
	Add for water charges	@	1%		₹ 1.75
					₹ 176.75
	Add for contractor's profit and overheads	@	15%		₹ 26.51
	Cost for 1 cum				₹ 203.26
	Extra cost for 1 cum	Say			₹ 203.30

5.37	Providing and fixing in position Stainless steel Grade 304 plate- 1.0 mm thick as per design for expansion joints.				
5.37.1	200 mm wide				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 metre				
	MATERIALS [including carriage]				
05067	1 mm thick Stainless steel cover plate grade 304	kg	1.6	₹ 300.00	₹ 480.00
08241	Stainless steel screws 30 mm x 4 mm	each	6	₹ 2.08	₹ 12.48
	LABOUR				
	For drilling holes and fixing with screws				
0215	Fitter	Day	0.067	₹ 380.00	₹ 25.46
0212	Coolie (F)	Day	0.067	₹ 300.00	₹ 20.10
					₹ 538.04
	Add for hire charges of Drilling machine	@	1%		₹ 5.38
					₹ 543.42
	Add for Sundries and contingencies	@	3%		₹ 16.30
					₹ 559.72
	Add for contractor's profit and overheads	@	15%		₹ 83.96
	Cost of 1 metre Stainless steel cover plate grade 304: 200 mm wide				₹ 643.68
	Rate per kg	Say			₹ 643.70

5.37.2	300 mm wide				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 1 metre				
	MATERIALS [including carriage]				

05067	1 mm thick Stainless steel cover plate grade 304	kg	2.4	₹ 300.00	₹ 720.00
08241	Stainless steel screws 30 mm x 4 mm	each	6	₹ 2.08	₹ 12.48
	LABOUR For drilling holes and fixing with screws				
0215	Fitter	Day	0.067	₹ 380.00	₹ 25.46
0212	Coolie (F)	Day	0.067	₹ 300.00	₹ 20.10
					₹ 778.04
	Add for hire charges of Drilling machine	@	1%		₹ 7.78
					₹ 785.82
	Add for Sundries and contingencies	@	3%		₹ 23.57
					₹ 809.39
	Add for contractor's profit and overheads	@	15%		₹ 121.41
	Cost of 1 metre Stainless steel cover plate grade 304: 200 mm wide				₹ 930.80
	Rate per kg	Say			₹ 930.80

5.38	Providing and fixing tapered / parallel threaded couplers conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement-Specification", to reinforcement bars including threading, enlargement at connection by forging, protecting the prepared reinforcement bars and related operations as required to complete the works as per direction of Engineer-in-Charge. (the length of the bars in which coupler is to be provided should not be less than 4 metre, no deduction for labour and binding wire saved for not providing lap length shall be made).				
5.38.1	Coupler for 16 mm diameter reinforcement bar				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for one job				
	MATERIALS				
05068	Coupler 16 mm dia.	each	1	₹ 75.00	₹ 75.00
	LABOUR For placing in position and fixing including Tapered / parallel threading				
0215	Fitter	Day	0.055	₹ 380.00	₹ 20.90
0212	Coolie (F)	Day	0.05	₹ 300.00	₹ 15.00
					₹ 110.90
	Add for Sundries and contingencies	@	3%		₹ 3.33
					₹ 114.23
	Add for contractor's profit and overheads	@	15%		₹ 17.13
	Cost of each				₹ 131.36
	Cost of each	Say			₹ 131.40

5.38.2	Coupler for 20 mm diameter reinforcement bar				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for one job				
	MATERIALS				
05069	Coupler 20 mm dia.	each	1	₹ 98.00	₹ 98.00
	LABOUR For placing in position and fixing including Tapered / parallel threading				
0215	Fitter	Day	0.09	₹ 380.00	₹ 34.20
0212	Coolie (F)	Day	0.07	₹ 300.00	₹ 21.00
					₹ 153.20
	Add for Sundries and contingencies	@	3%		₹ 4.60
					₹ 157.80
	Add for contractor's profit and overheads	@	15%		₹ 23.67
	Cost of each				₹ 181.47
	Cost of each	Say			₹ 181.50

5.38.3	Coupler for 25 mm diameter reinforcement bar				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for one job				
	MATERIALS				
05070	Coupler 25 mm dia.	each	1	₹ 145.00	₹ 145.00
	LABOUR For placing in position and fixing including Tapered / parallel threading				
0215	Fitter	Day	0.1	₹ 380.00	₹ 38.00
0212	Coolie (F)	Day	0.1	₹ 300.00	₹ 30.00
					₹ 213.00
	Add for Sundries and contingencies	@	3%		₹ 6.39
					₹ 219.39
	Add for contractor's profit and overheads	@	15%		₹ 32.91
	Cost of each				₹ 252.30
	Cost of each	Say			₹ 252.30

5.38.4	Coupler for 28 mm diameter reinforcement bar				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for one job				
	MATERIALS				
05071	Coupler 28 mm dia.	each	1	₹ 215.00	₹ 215.00
	LABOUR For placing in position and fixing including Tapered / parallel threading				
0215	Fitter	Day	0.15	₹ 380.00	₹ 57.00
0212	Coolie (F)	Day	0.1	₹ 300.00	₹ 30.00
					₹ 302.00
	Add for Sundries and contingencies	@	3%		₹ 9.06
					₹ 311.06
	Add for contractor's profit and overheads	@	15%		₹ 46.66
	Cost of each				₹ 357.72
	Cost of each	Say			₹ 357.70

5.38.5	Coupler for 32 mm diameter reinforcement bar				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for one job				
	MATERIALS				
05072	Coupler 32 mm dia.	each	1	₹ 258.00	₹ 258.00
	LABOUR For placing in position and fixing including Tapered / parallel threading				
0215	Fitter	Day	0.16	₹ 380.00	₹ 60.80
0212	Coolie (F)	Day	0.1	₹ 300.00	₹ 30.00
					₹ 348.80
	Add for Sundries and contingencies	@	3%		₹ 10.46
					₹ 359.26
	Add for contractor's profit and overheads	@	15%		₹ 53.89
	Cost of each				₹ 413.15
	Cost of each	Say			₹ 413.20

S U B - H E A D - 6



B R I C K W O R K

SUB HEAD : 6.0 / BRICK WORK
BASIC RATES

Code No	Description	Unit	Rate
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0224	Mate	Day	₹ 300.00
0205	Waterman	Day	₹ 300.00
0216	Foreman	Day	₹ 425.00
06003	Bitumen felt :Type 3 grade 1	Sqm	₹ 70.00
06004	Gypsum panel 666 X 500 X 100 mm size.	Sqm	₹ 800.00
06005	Bonding plaster for Gypsum panel.	Kg	₹ 78.00
05038	Mild steel round bar 12 mm dia and below	Quintal	₹ 4,055.00
05026	Steel Flats up to 10 mm in thickness	Quintal	₹ 3,992.00
01001	Diesel oil	Litre	₹ 54.27
06001	Brick (1st class)	1000 Nos	₹ 8,027.00
06002	Brick (2nd class)	1000 Nos	₹ 6,690.00
06006	Cement Concrete Soild Blocks	1000 Nos	₹ 10,000.00
0406	Carriage: Bricks	1000 Nos	₹ 332.82
0468	Carriage: Steel	Tonne	₹ 110.94
0472	Carriage: Bitumen felt	Tonne	₹ 110.94

SUB HEAD : 6.0
BRICK WORK

- 1 Manual mixing of cement mortars have been considered here. However, for using of mechanical mixer, the cost will differ with manual mixing as referred to SH:3/Mortar
- 2 Sand can be either coarse or fine as required/available. Here, provision of fine sand is considered only due to non-availability of coarse sand in Tripura. However, if design dictates for use of coarse sand, then separate analysis may be made as per site condition.
- 3 Steel reinforcement for reinforced brick works are required to be provided separately for which the extra rates are to be added. The rate for the same has been analysed using suitable bars in this chapter.
- 4 Bricks shall be soaked in water before use for a period for the water to just penetrate the whole depth of the bricks. Alternatively bricks may be adequately soaked in stacks by profusely spraying with clean water at regular intervals for a period not less than six hours. When the bricks are soaked they shall be removed from the tank sufficiently early so that at the time of laying they are skin-dry. Such soaked bricks shall be stacked on a clean place where they are not again spoiled by dirt earth etc.
- 5 Green work shall be protected from the effects of sun and rain by suitable covering and also from damage, mortar dropping etc.during the execution of the work. Masonry work in cement or composite mortar shall be kept constantly moist on all faces for a minimum period of seven days. In case of masonry with fat lime mortar, curing shall commence two days after laying of masonry and shall continue for at least seven days thereafter.
- 6 For earth quake resistance brick masonry work as specified in IS:4326-1993, the essential elements required to be constructed are : (i) RCC band of approved grade of concrete and steel at Plinth level, Sill level, Lintel level, Floor / Roof level (ii) Vertical reinforcement of approved grade & dia. at the corners and junctions of all rooms, side/ jamb of openings (doors, windows etc.)
- 7 Consumption of bricks has been considered as per the sizes of the bricks available in Tripura.
- 8 Locally available well burnt 1st class bricks and 2nd class bricks with following classification & dimension will be used:-

Type of Bricks	Dimension (in mm) {Length x Breadth x Depth}			Minimum compressive strength	Water Absorption
	Actual	Nominal	Tolerance	{Not less than}	{Not more than}
1 st class	250x120x70	255x123x72	±3	105 Kgf/cm ²	20% by weight
2 nd class	250x120x70	255x123x72	±5	75 Kgf/cm ²	25% by weight

- 9 All other specification for quality, sampling and tests including efflorescence of bricks shall generally be as Chapter - 6 of CPWD's specification.

6.1 First class brick work in foundation and plinth including cost of all materials as required complete:-

6.1.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.250	₹ 5,011.28	₹ 1,252.82
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,977.55	₹ 49.78
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,027.33	₹ 150.82
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,178.15	₹ 776.72
				Total	₹ 5,954.87
	Total cost for 1 Cum			Say,	₹ 5,954.90

6.1.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.250	₹ 3,992.09	₹ 998.02
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,722.75	₹ 47.23
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,769.98	₹ 143.10
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,913.08	₹ 736.96
				Total	₹ 5,650.04
	Total cost for 1 Cum			Say,	₹ 5,650.00

6.1.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.250	₹ 3,184.67	₹ 796.17
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,520.90	₹ 45.21
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,566.11	₹ 136.98
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,703.09	₹ 705.46
				Total	₹ 5,408.55
	Total cost for 1 Cum			Say,	₹ 5,408.60

6.1.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:5 (Rate as per item No. 3.1.5)	Cum	0.250	₹ 2,749.90	₹ 687.48
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,412.21	₹ 44.12
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,456.33	₹ 133.69
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,590.02	₹ 688.50

				Total	₹ 5,278.52
	Total cost for 1 Cum			Say,	₹ 5,278.50

6.1.5 In cement mortar 1:6 (1 cement : 6 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:6 (Rate as per item No. 3.1.6)	Cum	0.250	₹ 2,377.25	₹ 594.31
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,319.04	₹ 43.19
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,362.23	₹ 130.87
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,493.10	₹ 673.97
				Total	₹ 5,167.07
	Total cost for 1 Cum			Say,	₹ 5,167.10

6.2 Second class brick work in foundation and plinth including cost of all materials as required complete:-

6.2.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.250	₹ 5,011.28	₹ 1,252.82
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,469.49	₹ 44.69
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,514.18	₹ 135.43
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,649.61	₹ 697.44
				Total	₹ 5,347.05
	Total cost for 1 Cum			Say,	₹ 5,347.10

6.2.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.250	₹ 3,992.09	₹ 998.02

	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,214.69	₹ 42.15
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,256.84	₹ 127.71
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,384.55	₹ 657.68
				Total	₹ 5,042.23
	Total cost for 1 Cum			Say,	₹ 5,042.20

6.2.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.250	₹ 3,184.67	₹ 796.17
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,012.84	₹ 40.13
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,052.97	₹ 121.59
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,174.56	₹ 626.18
				Total	₹ 4,800.74
	Total cost for 1 Cum			Say,	₹ 4,800.70

6.2.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:5 (Rate as per item No. 3.1.5)	Cum	0.250	₹ 2,749.90	₹ 687.48
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 3,904.15	₹ 39.04
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 3,943.19	₹ 118.30
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,061.49	₹ 609.22
				Total	₹ 4,670.71
	Total cost for 1 Cum			Say,	₹ 4,670.70

6.2.5 In cement mortar 1:6 (1 cement : 6 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:6 (Rate as per item No. 3.1.6)	Cum	0.250	₹ 2,377.25	₹ 594.31
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 3,810.98	₹ 38.11
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 3,849.09	₹ 115.47
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 3,964.56	₹ 594.68
				Total	₹ 4,559.24
	Total cost for 1 Cum			Say,	₹ 4,559.20

6.3 First class brick work in superstructure above plinth level & upto floor-five level including cost of all materials as required complete:-

6.3.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.250	₹ 5,011.28	₹ 1,252.82
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 4.20% on total.	4.20%	on	₹ 5,191.55	₹ 218.05
	e. Water charges: @ 1% on total.	1%	on	₹ 5,409.60	₹ 54.10
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,463.70	₹ 163.91
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,627.61	₹ 844.14
				Total	₹ 6,471.75
	Total cost for 1 Cum			Say,	₹ 6,471.80

6.3.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.250	₹ 3,992.09	₹ 998.02
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00

0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 4.45% on total.	4.45%	on	₹ 4,936.75	₹ 219.69
	e. Water charges: @ 1% on total.	1%	on	₹ 5,156.44	₹ 51.56
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,208.00	₹ 156.24
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,364.24	₹ 804.64
				Total	₹ 6,168.88
	Total cost for 1 Cum			Say,	₹ 6,168.90

6.3.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:4(Rate as per item No. 3.1.4)	Cum	0.250	₹ 3,184.67	₹ 796.17
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 4.7% on total.	4.7%	on	₹ 4,734.90	₹ 222.54
	e. Water charges: @ 1% on total.	1%	on	₹ 4,957.44	₹ 49.57
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,007.01	₹ 150.21
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,157.22	₹ 773.58
				Total	₹ 5,930.80
	Total cost for 1 Cum			Say,	₹ 5,930.80

6.3.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:5(Rate as per item No. 3.1.5)	Cum	0.25	₹ 2,749.90	₹ 687.48
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 4.8% on total.	4.8%	on	₹ 4,626.21	₹ 222.06
	e. Water charges: @ 1% on total.	1%	on	₹ 4,848.27	₹ 48.48
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,896.75	₹ 146.90
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,043.65	₹ 756.55
				Total	₹ 5,800.20
	Total cost for 1 Cum			Say,	₹ 5,800.20

6.3.5 In cement mortar 1:6 (1 cement : 6 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	380	₹ 8,027.00	₹ 3,050.26
	Cement mortar 1:6(Rate as per item No. 3.1.6)	Cum	0.25	₹ 2,377.25	₹ 594.31
	b. Carriage:				
0406	1st class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 5.0% on total.	5.0%	on	₹ 4,533.04	₹ 226.65
	e. Water charges: @ 1% on total.	1%	on	₹ 4,759.69	₹ 47.60
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,807.29	₹ 144.22
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,951.51	₹ 742.73
				Total	₹ 5,694.24
	Total cost for 1 Cum			Say,	₹ 5,694.20

6.4 Second class brick work in superstructure above plinth level & upto floor-five level including cost of all materials as required complete:-

6.4.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.250	₹ 5,011.28	₹ 1,252.82
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 4.65% on total.	4.65%	on	₹ 4,683.49	₹ 217.78
	e. Water charges: @ 1% on total.	1%	on	₹ 4,901.27	₹ 49.01
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,950.28	₹ 148.51
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,098.79	₹ 764.82
				Total	₹ 5,863.61
	Total cost for 1 Cum			Say,	₹ 5,863.60

6.4.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.250	₹ 3,992.09	₹ 998.02
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00

0224	Mate	Day	0.09	₹	300.00	₹	27.00
0203	Belder	Day	0.65	₹	300.00	₹	195.00
0212	Coolie (female)	Day	0.65	₹	300.00	₹	195.00
0205	Waterman	Day	0.30	₹	300.00	₹	90.00
	d. Scaffolding, lifts, challis etc.: @ 5.00% on total.	5.00%	on	₹	4,428.69	₹	221.43
	e. Water charges: @ 1% on total.	1%	on	₹	4,650.12	₹	46.50
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹	4,696.62	₹	140.90
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	4,837.52	₹	725.63
					Total	₹	5,563.15
	Total cost for 1 Cum				Say,	₹	5,563.20

6.4.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:4(Rate as per item No. 3.1.4)	Cum	0.250	₹ 3,184.67	₹ 796.17
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 5.3% on total.	5.3%	on	₹ 4,226.84	₹ 224.02
	e. Water charges: @ 1% on total.	1%	on	₹ 4,450.86	₹ 44.51
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,495.37	₹ 134.86
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,630.23	₹ 694.53
				Total	₹ 5,324.76
	Total cost for 1 Cum			Say,	₹ 5,324.80

6.4.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:5(Rate as per item No. 3.1.5)	Cum	0.25	₹ 2,749.90	₹ 687.48
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 5.5% on total.	5.5%	on	₹ 4,118.15	₹ 226.50
	e. Water charges: @ 1% on total.	1%	on	₹ 4,344.65	₹ 43.45
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,388.10	₹ 131.64

	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,519.74	₹ 677.96
				Total	₹ 5,197.70
	Total cost for 1 Cum			Say,	₹ 5,197.70

6.4.5 In cement mortar 1:6 (1 cement : 6 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	380	₹ 6,690.00	₹ 2,542.20
	Cement mortar 1:6(Rate as per item No. 3.1.6)	Cum	0.25	₹ 2,377.25	₹ 594.31
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	380	₹ 332.82	₹ 126.47
	c. Labours:				
0219	Mason 1st Class	Day	0.60	₹ 425.00	₹ 255.00
0224	Mate	Day	0.09	₹ 300.00	₹ 27.00
0203	Belder	Day	0.65	₹ 300.00	₹ 195.00
0212	Coolie (female)	Day	0.65	₹ 300.00	₹ 195.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Scaffolding, lifts, challis etc.: @ 5.7% on total.	5.7%	on	₹ 4,024.98	₹ 229.42
	e. Water charges: @ 1% on total.	1%	on	₹ 4,254.40	₹ 42.54
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,296.94	₹ 128.91
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,425.85	₹ 663.88
				Total	₹ 5,089.73
	Total cost for 1 Cum			Say,	₹ 5,089.70

6.5 Extra for brick masonry work in superstructure above floor-V level for each four floors or part thereof by mechanical means by lifting material using mobile crane as required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5.300 cum per four floors .[For both 1st class and 2nd class bricks with all mortars]	Cum.			
	a. Materials and T&P:				
0121	Mobile crane (hire)	Day	0.125	₹ 7,560.00	₹ 945.00
01001	Fuel consumption per hour = 8 litre. Diesel oil	Ltr.	8.000	₹ 54.27	₹ 434.16
	b. Carriage: Fuel	LS	5.000	₹ 1.00	₹ 5.00
	c. Water charges: @ 1% on total.	1%	on	₹ 1,384.16	₹ 13.84
	d. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,398.00	₹ 41.94
	e. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,439.94	₹ 215.99
				Total	₹ 1,655.93
	Total cost for 1 Cum				₹ 312.44
				Say,	₹ 312.40

6.6 Extra for brick masonry work in triangular, square and rectangular pillars including cost of all materials as required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Labours (extra):				
0219	Mason 1st Class	Day	0.67	₹ 425.00	₹ 284.75
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
	b. Water charges: @ 1% on total.	1%	on	₹ 293.75	₹ 2.94
	c. Sundries & contingencies: @ 3% on total.	3%	on	₹ 296.69	₹ 8.90

	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 305.59	₹ 45.84
				Total	₹ 351.43
	Total cost for 1 Cum			Say,	₹ 351.40

6.7 Extra for brick masonry work in circular pillars including cost of all materials as required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Labours (extra):				
0219	Mason 1st Class	Day	1.20	₹ 425.00	₹ 510.00
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
	b. Water charges: @ 1% on total.	1%	on	₹ 525.00	₹ 5.25
	c. Sundries & contingencies: @ 3% on total.	3%	on	₹ 530.25	₹ 15.91
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 546.16	₹ 81.92
				Total	₹ 628.08
	Total cost for 1 Cum			Say,	₹ 628.10

6.8 First class brick work in plain arches in superstructure upto floor five level including centring and shuttering for span upto 6 metres as required complete:-

6.8.1 In cement mortar 1:2 (1 cement: 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	395	₹ 8,027.00	₹ 3,170.67
	Cement mortar 1:2 [As per item No. 3.1.2] (A)	Cum	0.250	₹ 5,011.28	₹ 1,252.82
	Centering and Shuttering:				
	Taking a semi circular arch 3.6m span, 3.6m long and 0.40m thick				
	Area of centering = $3.1428 \times 1.8 \times 3.6 = 20.37$ Sqm.				
	Brick work in Arch = $1/2 \times 3.1428 \times 1/2 \times (4.4 + 3.6) \times 0.4 \times 3.6 = 9.050$ Cum.				
	Area per Cum. = $20.37/9.05 = 2.25$ Sqm. [As per Item 5.9.8] (B)	Sqm.	2.25	₹ 599.20	₹ 1,158.08
	Scaffolding, lifts, challis etc. (C)	2%	on	₹ 4,423.49	₹ 88.47
	b. Carriage:				
0406	1st class bricks.	1000 Nos	395	₹ 332.82	₹ 131.46
	c. Labours:				
0219	Mason 1st Class	Day	0.90	₹ 425.00	₹ 382.50
0224	Mate	Day	0.14	₹ 300.00	₹ 42.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0203	Belder	Day	1.25	₹ 300.00	₹ 375.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Water charges: @ 1% on total e/x B	1%	on	₹ 5,832.92	₹ 58.33
	e. Sundries & contingencies: @ 3% on total e/x B	3%	on	₹ 5,891.25	₹ 176.74
	f. Contractor's profit & overheads: @ 15% on total e/x B	15%	on	₹ 6,067.99	₹ 910.20
				Total	₹ 8,136.27
	Total cost for 1 Cum			Say,	₹ 8,136.30

6.8.2 In cement mortar 1:3 (1 cement: 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	395	₹ 8,027.00	₹ 3,170.67
	Cement mortar 1:3 [As per item No. 3.1.3] (A)	Cum	0.250	₹ 3,992.09	₹ 998.02
	Centering and Shuttering:				

	Taking a semi circular arch 3.6m span, 3.6m long and 0.40m thick				
	Area of centering = $3.142 \times 1.8 \times 3.6 = 20.37$ Sqm.				
	Brick work in Arch = $1/2 \times 3.1428 \times 1/2 \times (4.4 + 3.6) \times 0.4 \times 3.6 = 9.050$ Cum.				
	Area per Cum. = $20.37/9.05 = 2.25$ Sqm. [As per Item 5.9.8] (B)	Sqm.	2.25	₹ 599.20	₹ 1,158.08
	Scaffolding, lifts, challis etc. (C)	2%	on	₹ 4,168.69	₹ 83.37
	b. Carriage:				
0406	1st class bricks.	1000 Nos	395	₹ 332.82	₹ 131.46
	c. Labours:				
0219	Mason 1st Class	Day	0.90	₹ 425.00	₹ 382.50
0224	Mate	Day	0.14	₹ 300.00	₹ 42.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0203	Belder	Day	1.25	₹ 300.00	₹ 375.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Water charges: @ 1% on total e/x B	1%	on	₹ 5,573.02	₹ 55.73
	e. Sundries & contingencies: @ 3% on total e/x B	3%	on	₹ 5,628.75	₹ 168.86
	f. Contractor's profit & overheads: @ 15% on total e/x B	15%	on	₹ 5,797.61	₹ 869.64
				Total	₹ 7,825.33
	Total cost for 1 Cum			Say,	₹ 7,825.30

6.8.3 In cement mortar 1:4 (1 cement: 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	395	₹ 8,027.00	₹ 3,170.67
	Cement mortar 1:4 [As per item No. 3.1.4] (A)	Cum	0.250	₹ 3,184.67	₹ 796.17
	Centering and Shuttering:				
	Taking a semi circular arch 3.6m span, 3.6m long and 0.40m thick				
	Area of centering = $3.142 \times 1.8 \times 3.6 = 20.37$ Sqm.				
	Brick work in Arch = $1/2 \times 3.1428 \times 1/2 \times (4.4 + 3.6) \times 0.4 \times 3.6 = 9.050$ Cum.				
	Area per Cum. = $20.37/9.05 = 2.25$ Sqm. [As per Item 5.9.8] (B)	Sqm.	2.25	₹ 599.20	₹ 1,158.08
	Scaffolding, lifts, challis etc. (C)	2%	on	₹ 3,966.84	₹ 79.34
	b. Carriage:				
0406	1st class bricks.	1000 Nos	395	₹ 332.82	₹ 131.46
	c. Labours:				
0219	Mason 1st Class	Day	0.90	₹ 425.00	₹ 382.50
0224	Mate	Day	0.14	₹ 300.00	₹ 42.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0203	Belder	Day	1.25	₹ 300.00	₹ 375.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Water charges: @ 1% on total e/x B	1%	on	₹ 5,367.14	₹ 53.67
	e. Sundries & contingencies: @ 3% on total e/x B	3%	on	₹ 5,420.81	₹ 162.62
	f. Contractor's profit & overheads: @ 15% on total e/x B	15%	on	₹ 5,583.43	₹ 837.51
				Total	₹ 7,579.02
	Total cost for 1 Cum			Say,	₹ 7,579.00

6.9 First class brick work in gauged arches in superstructure upto floor five level including centring and shuttering complete for span upto 6 metres as required complete:-

6.9.1 In cement mortar 1:2 (1 cement: 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			

	a. Materials:				
06001	1st class bricks.	1000 Nos	399	₹ 8,027.00	₹ 3,202.77
	Cement mortar 1:2 [As per item No. 3.1.2] (A)	Cum	0.250	₹ 5,011.28	₹ 1,252.82
	Centering and Shuttering:				
	Taking a semi circular arch 3.6m span, 3.6m long and 0.40m thick				
	Area of centering = $3.142 \times 1.8 \times 3.6 = 20.37$ sqm.				
	Brick work in Arch = $1/2 \times 3.1428 \times 1/2 \times (4.4 + 3.6) \times 0.4 \times 3.6 = 9.050$ Cum.				
	Area per Cum. = $20.37/9.05 = 2.25$ Sqm. [As per Item 5.9.8] (B)	Sqm.	2.25	₹ 599.20	₹ 1,158.08
	Scaffolding, lifts, challis etc. (C)	2%	on	₹ 4,455.59	₹ 89.11
	b. Carriage:				
0406	1st class bricks.	1000 Nos	399	₹ 332.82	₹ 132.80
	c. Labours:				
0219	Mason 1st Class	Day	1.90	₹ 425.00	₹ 807.50
0224	Mate	Day	0.26	₹ 300.00	₹ 78.00
0212	Coolie	Day	2.00	₹ 300.00	₹ 600.00
0203	Belder	Day	2.25	₹ 300.00	₹ 675.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Water charges: @ 1% on total e/x B.	1%	on	₹ 6,928.00	₹ 69.28
	e. Sundries & contingencies: @ 3% on total e/x B.	3%	on	₹ 6,997.28	₹ 209.92
	f. Contractor's profit & overheads: @ 15% on total e/x B.	15%	on	₹ 7,207.20	₹ 1,081.08
				Total	₹ 9,446.36
	Total cost for 1 Cum			Say,	₹ 9,446.40

6.9.2 In cement mortar 1:3 (cement:3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	399	₹ 8,027.00	₹ 3,202.77
	Cement mortar 1:3 [As per item No. 3.1.3] (A)	Cum	0.250	₹ 3,992.09	₹ 998.02
	Centering and Shuttering:				
	Taking a semi circular arch 3.6m span, 3.6m long and 0.40m thick				
	Area of centering = $3.142 \times 1.8 \times 3.6 = 20.37$ sqm.				
	Brick work in Arch = $1/2 \times 3.1428 \times 1/2 \times (4.4 + 3.6) \times 0.4 \times 3.6 = 9.050$ Cum.				
	Area per Cum. = $20.37/9.05 = 2.25$ Sqm. [As per Item 5.9.8] (B)	Sqm.	2.25	₹ 599.20	₹ 1,158.08
	Scaffolding, lifts, challis etc. (C)	2%	on	₹ 4,200.79	₹ 84.02
	b. Carriage:				
0406	1st class bricks.	1000 Nos	399	₹ 332.82	₹ 132.80
	c. Labours:				
0219	Mason 1st Class	Day	1.90	₹ 425.00	₹ 807.50
0224	Mate	Day	0.26	₹ 300.00	₹ 78.00
0212	Coolie	Day	2.00	₹ 300.00	₹ 600.00
0203	Belder	Day	2.25	₹ 300.00	₹ 675.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Water charges: @ 1% on total e/x B.	1%	on	₹ 6,668.11	₹ 66.68
	e. Sundries & contingencies: @ 3% on total e/x B.	3%	on	₹ 6,734.79	₹ 202.04
	f. Contractor's profit & overheads: @ 15% on total e/x B.	15%	on	₹ 6,936.83	₹ 1,040.52
				Total	₹ 9,135.43
	Total cost for 1 Cum			Say,	₹ 9,135.40

6.9.3 In cement mortar 1:4 (cement:4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	399	₹ 8,027.00	₹ 3,202.77
	Cement mortar 1:4 [As per item No. 3.1.4] (A)	Cum	0.250	₹ 3,184.67	₹ 796.17
	Centering and Shuttering:				
	Taking a semi circular arch 3.6m span, 3.6m long and 0.40m thick				
	Area of centering = $3.142 \times 1.8 \times 3.6 = 20.37$ sqm.				
	Brick work in Arch = $1/2 \times 3.1428 \times 1/2 \times (4.4 + 3.6) \times 0.4 \times 3.6 = 9.050$ Cum.				
	Area per Cum. = $20.37/9.05 = 2.25$ Sqm. [As per Item 5.9.8] (B)	Sqm.	2.25	₹ 599.20	₹ 1,158.08
	Scaffolding, lifts, challis etc. (C)	2%	on	₹ 3,998.94	₹ 79.98
	b. Carriage:				
0406	1st class bricks.	1000 Nos	399	₹ 332.82	₹ 132.80
	c. Labours:				
0219	Mason 1st Class	Day	1.90	₹ 425.00	₹ 807.50
0224	Mate	Day	0.26	₹ 300.00	₹ 78.00
0212	Coolie	Day	2	₹ 300.00	₹ 600.00
0203	Belder	Day	2.25	₹ 300.00	₹ 675.00
0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
	d. Water charges: @ 1% on total e/x B.	1%	on	₹ 6,462.22	₹ 64.62
	e. Sundries & contingencies: @ 3% on total e/x B.	3%	on	₹ 6,526.84	₹ 195.81
	f. Contractor's profit & overheads: @ 15% on total e/x B.	15%	on	₹ 6,722.65	₹ 1,008.40
				Total	₹ 8,889.13
	Total cost for 1 Cum			Say,	₹ 8,889.10

6.10 Half brick masonry with first class bricks in foundation and plinth including cost of all materials as required complete:-

6.10.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	520	₹ 8,027.00	₹ 4,174.04
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.280	₹ 5,011.28	₹ 1,403.16
	b. Carriage:				
0406	1st class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	0.85	₹ 425.00	₹ 361.25
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar (male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 6,510.52	₹ 65.11
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,575.63	₹ 197.27
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,772.90	₹ 1,015.94
				Total	₹ 7,788.84
	Total cost for 1 Sqm				₹ 778.88
				Say,	₹ 778.90

6.10.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	520	₹ 8,027.00	₹ 4,174.04

	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.280	₹ 3,992.09	₹ 1,117.79
	b. Carriage:				
0406	1st class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	0.85	₹ 425.00	₹ 361.25
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar (male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 6,225.15	₹ 62.25
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,287.40	₹ 188.62
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,476.02	₹ 971.40
				Total	₹ 7,447.42
	Total cost for 1 Sqm				₹ 744.74
				Say,	₹ 744.70

6.10.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	520	₹ 8,027.00	₹ 4,174.04
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.280	₹ 3,184.67	₹ 891.71
	b. Carriage:				
0406	1st class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	0.85	₹ 425.00	₹ 361.25
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar (male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 5,999.07	₹ 59.99
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,059.06	₹ 181.77
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,240.83	₹ 936.12
				Total	₹ 7,176.95
	Total cost for 1 Sqm				₹ 717.70
				Say,	₹ 717.70

6.10.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	520	₹ 8,027.00	₹ 4,174.04
	Cement mortar 1:5 (Rate as per item No. 3.1.5)	Cum	0.280	₹ 2,749.90	₹ 769.97
	b. Carriage:				
0406	1st class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	0.85	₹ 425.00	₹ 361.25
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar (male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 5,877.33	₹ 58.77
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,936.10	₹ 178.08
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,114.18	₹ 917.13
				Total	₹ 7,031.31
	Total cost for 1 Sqm				₹ 703.13
				Say,	₹ 703.10

6.11 Half brick masonry with second class bricks in foundation and plinth including cost of all materials required as required complete:-

6.11.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.280	₹ 5,011.28	₹ 1,403.16
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	0.85	₹ 425.00	₹ 361.25
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar (male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 5,815.28	₹ 58.15
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,873.43	₹ 176.20
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,049.63	₹ 907.44
				Total	₹ 6,957.07
	Total cost for 1 Sqm				₹ 695.71
				Say,	₹ 695.70

6.11.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.280	₹ 3,992.09	₹ 1,117.79
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	0.85	₹ 425.00	₹ 361.25
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar (male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 5,529.91	₹ 55.30
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,585.21	₹ 167.56
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,752.77	₹ 862.92
				Total	₹ 6,615.69
	Total cost for 1 Sqm				₹ 661.57
				Say,	₹ 661.60

6.11.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.280	₹ 3,184.67	₹ 891.71
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	0.85	₹ 425.00	₹ 361.25
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar (male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00

0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 5,303.83	₹ 53.04
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,356.87	₹ 160.71
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,517.58	₹ 827.64
				Total	₹ 6,345.22
	Total cost for 1 Sqm				₹ 634.52
				Say,	₹ 634.50

6.11.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
	Cement mortar 1:5 (Rate as per item No. 3.1.5)	Cum	0.280	₹ 2,749.90	₹ 769.97
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	0.85	₹ 425.00	₹ 361.25
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar (male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 5,182.09	₹ 51.82
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,233.91	₹ 157.02
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,390.93	₹ 808.64
				Total	₹ 6,199.57
	Total cost for 1 Sqm				₹ 619.96
				Say,	₹ 620.00

6.12 Half brick masonry with first class bricks in superstructure upto floor five level including cost of all materials as required complete:-

6.12.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	520	₹ 8,027.00	₹ 4,174.04
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.280	₹ 5,011.28	₹ 1,403.16
	b. Carriage:				
0406	1st class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	1.10	₹ 425.00	₹ 467.50
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar (male)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (female)	Day	0.60	₹ 300.00	₹ 180.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
	d. Scaffolding, lifts, challis etc: @ 5.03% on total.	5.03%	on	₹ 6,745.77	₹ 339.31
	e. Water charges: @ 1% on total.	1%	on	₹ 7,085.08	₹ 70.85
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 7,155.93	₹ 214.68
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 7,370.61	₹ 1,105.59
				Total	₹ 8,476.20
	Total cost for 1 Sqm				₹ 847.62
				Say,	₹ 847.60

6.12.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				

06001	1st class bricks.	1000 Nos	520	₹ 8,027.00	₹ 4,174.04
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.280	₹ 3,992.09	₹ 1,117.79
	b. Carriage:				
0406	1st class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	1.10	₹ 425.00	₹ 467.50
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar (male)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (female)	Day	0.60	₹ 300.00	₹ 180.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
	d. Scaffolding, lifts, challis etc: @ 5.32% on total.	5.32%	on	₹ 6,460.40	₹ 343.69
	e. Water charges: @ 1% on total.	1%	on	₹ 6,804.09	₹ 68.04
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,872.13	₹ 206.16
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 7,078.29	₹ 1,061.74
				Total	₹ 8,140.03
	Total cost for 1 Sqm				₹ 814.00
				Say,	₹ 814.00

6.12.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	520	₹ 8,027.00	₹ 4,174.04
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.280	₹ 3,184.67	₹ 891.71
	b. Carriage:				
0406	1st class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	1.10	₹ 425.00	₹ 467.50
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar (male)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (female)	Day	0.60	₹ 300.00	₹ 180.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
	d. Scaffolding, lifts, challis etc: @ 5.56% on total.	5.56%	on	₹ 6,234.32	₹ 346.63
	e. Water charges: @ 1% on total.	1%	on	₹ 6,580.95	₹ 65.81
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,646.76	₹ 199.40
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,846.16	₹ 1,026.92
				Total	₹ 7,873.08

	Total cost for 1 Sqm			₹	787.31
				Say,	₹ 787.30

6.12.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	520	₹ 8,027.00	₹ 4,174.04
	Cement mortar 1:5 (Rate as per item No. 3.1.5)	Cum	0.280	₹ 2,749.90	₹ 769.97
	b. Carriage:				
0406	1st class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	1.10	₹ 425.00	₹ 467.50
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar (male)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (female)	Day	0.60	₹ 300.00	₹ 180.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
	d. Scaffolding, lifts, challis etc: @ 5.70% on total.	5.70%	on	₹ 6,112.58	₹ 348.42
	e. Water charges: @ 1% on total.	1%	on	₹ 6,461.00	₹ 64.61
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,525.61	₹ 195.77
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,721.38	₹ 1,008.21
				Total	₹ 7,729.59
	Total cost for 1 Sqm				₹ 772.96
				Say,	₹ 773.00

6.13 Half brick masonry with second class bricks in superstructure upto floor five level including cost of all materials as required complete:-

6.13.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.280	₹ 5,011.28	₹ 1,403.16
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	1.10	₹ 425.00	₹ 467.50
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar (male)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (female)	Day	0.60	₹ 300.00	₹ 180.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
	d. Scaffolding, lifts, challis etc: @ 5.64% on total.	5.64%	on	₹ 6,050.53	₹ 341.25
	e. Water charges: @ 1% on total.	1%	on	₹ 6,391.78	₹ 63.92
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,455.70	₹ 193.67
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,649.37	₹ 997.41
				Total	₹ 7,646.78
	Total cost for 1 Sqm				₹ 764.68
				Say,	₹ 764.70

6.13.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.280	₹ 3,992.09	₹ 1,117.79
	b. Carriage:				

0406	2nd class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	1.10	₹ 425.00	₹ 467.50
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar (male)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (female)	Day	0.60	₹ 300.00	₹ 180.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
	d. Scaffolding, lifts, challis etc: @ 6.00% on total.	6.00%	on	₹ 5,765.16	₹ 345.91
	e. Water charges: @ 1% on total.	1%	on	₹ 6,111.07	₹ 61.11
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,172.18	₹ 185.17
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,357.35	₹ 953.60
				Total	₹ 7,310.95
	Total cost for 1 Sqm				₹ 731.10
				Say,	₹ 731.10

6.13.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.280	₹ 3,184.67	₹ 891.71
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	1.10	₹ 425.00	₹ 467.50
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar (male)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (female)	Day	0.60	₹ 300.00	₹ 180.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
	d. Scaffolding, lifts, challis etc: @ 6.30% on total.	6.30%	on	₹ 5,539.08	₹ 348.96
	e. Water charges: @ 1% on total.	1%	on	₹ 5,888.04	₹ 58.88
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,946.92	₹ 178.41
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,125.33	₹ 918.80
				Total	₹ 7,044.13
	Total cost for 1 Sqm				₹ 704.41
				Say,	₹ 704.40

6.13.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
	Cement mortar 1:5 (Rate as per item No. 3.1.5)	Cum	0.280	₹ 2,749.90	₹ 769.97
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	520	₹ 332.82	₹ 173.07
	c. Labours:				
0219	Mason 1st Class	Day	1.10	₹ 425.00	₹ 467.50
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar (male)	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie (female)	Day	0.60	₹ 300.00	₹ 180.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
	d. Scaffolding, lifts, challis etc: @ 6.5% on total.	6.5%	on	₹ 5,417.34	₹ 352.13
	e. Water charges: @ 1% on total.	1%	on	₹ 5,769.47	₹ 57.69
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 5,827.16	₹ 174.81

	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,001.97	₹ 900.30
				Total	₹ 6,902.27
	Total cost for 1 Sqm				₹ 690.23
				Say,	₹ 690.20

6.14 Extra for half brick masonry work in superstructure above floor-V level for each four floors or part thereof by mechanical means by lifting material using mobile crane as required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 42.40 Sqm per four floors .[For both 1st class and 2nd class bricks with all mortars]	Sqm.			
	a. T&P:				
0121	Mobile crane (hire)	Day	0.125	₹ 7,560.00	₹ 945.00
01001	Fuel consumption per hour = 8 litre. Diesel oil	Ltr.	8.000	₹ 54.27	₹ 434.16
	b. Carriage: Fuel	LS	5.000	₹ 1.00	₹ 5.00
	c. Water charges: @ 1% on total.	1%	on	₹ 1,384.16	₹ 13.84
	d. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,398.00	₹ 41.94
	e. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,439.94	₹ 215.99
				Total	₹ 1,655.93
	Total cost for 1 Sqm				₹ 39.05
				Say,	₹ 39.10

6.15 1st class brick work 75mm thick in superstructure upto floor five level including cost of all materials as required complete:-
In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06001	1st class bricks.	1000 Nos	312	₹ 8,027.00	₹ 2,504.42
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.181	₹ 3,992.09	₹ 722.57
	b. Carriage:				
0406	1st class bricks.	1000 Nos	312	₹ 332.82	₹ 103.84
	c. Labours:				
0219	Mason 1st Class	Day	0.90	₹ 425.00	₹ 382.50
0220	Mason 2nd Class	Day	0.90	₹ 380.00	₹ 342.00
0212	Coolie (male)	Day	1.80	₹ 300.00	₹ 540.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges: @ 1% on total.	1%	on	₹ 4,670.33	₹ 46.70
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,717.03	₹ 141.51
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,858.54	₹ 728.78
				Total	₹ 5,587.32
	Total cost for 1 Sqm				₹ 558.73
				Say,	₹ 558.70

6.16 2nd class brick masonry work 75mm thick in superstructure upto floor five level including cost of all materials as required complete:-

6.16.1 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials:				
06002	2nd class bricks.	1000 Nos	312	₹ 6,690.00	₹ 2,087.28
	Cement mortar 1:3 (Rate as per item No. 3.1.4)	Cum	0.181	₹ 3,992.09	₹ 722.57
	b. Carriage:				
0406	2nd class bricks.	1000 Nos	312	₹ 332.82	₹ 103.84
	c. Labours:				

0219	Mason 1st Class	Day	0.90	₹	425.00	₹	382.50
0220	Mason 2nd Class	Day	0.90	₹	380.00	₹	342.00
0212	Coolie (male)	Day	1.80	₹	300.00	₹	540.00
0205	Bhisti/ Waterman	Day	0.25	₹	300.00	₹	75.00
	d. Water charges: @ 1% on total.	1%	on	₹	4,253.19	₹	42.53
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹	4,295.72	₹	128.87
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	4,424.59	₹	663.69
					Total	₹	5,088.28
	Total cost for 1 Sqm					₹	508.83
					Say,	₹	508.80

6.17 Extra for 75mm thick brick masonry work in superstructure above floor-V level for each four floors or part thereof by mechanical means by lifting material using mobile crane etc. as required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 69.75Sqm per four floors .[For both 1st class and 2nd class bricks with all mortars]	Sqm.			
	a. Materials and T&P:				
0121	Mobile crane (hire)	Day	0.125	₹ 7,560.00	₹ 945.00
01001	Fuel consumption per hour = 8 litre. Diesel oil	Ltr.	8.000	₹ 54.27	₹ 434.16
	b. Carriage: Fuel	LS	5.000	₹ 1.00	₹ 5.00
	c. Water charges: @ 1% on total.	1%	on	₹ 1,384.16	₹ 13.84
	d. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,398.00	₹ 41.94
	e. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,439.94	₹ 215.99
				Total	₹ 1,655.93
	Total cost for 1 Sqm				₹ 23.74
				Say,	₹ 23.70

6.18 Extra for providing & placing in position 2 nos 6mm dia MS bars at every 6th course of full brick masonry work including anchorage in joints of 75mm in each side in superstructure for all level including cost of all materials as required complete:-

6.18.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3 cum.	Cum.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.= 2x5.8 Kg. =11.60 Kg.	Qtl.	0.116	₹ 4,055.00	₹ 470.38
	Cement mortar (extra) 1:2	Cum	0.200	₹ 5,011.28	₹ 1,002.26
	b. Carriage:				
0468	2 nos 6mm dia. reinf.=2x5.8 Kg. =11.60 Kg.	Tonne	0.01160	₹ 110.94	₹ 1.29
	c. Labours (extra):				
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,549.43	₹ 15.49
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,564.92	₹ 46.95
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,611.87	₹ 241.78
				Total	₹ 1,853.65
	Total cost for 1 Cum				₹ 617.88
				Say,	₹ 617.90

6.18.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3 cum.	Cum.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.= 2x5.8 Kg. =11.60 Kg.	Qtl.	0.116	₹ 4,055.00	₹ 470.38

	Cement mortar (extra) 1:3	Cum	0.200	₹ 3,992.09	₹ 798.42
	b. Carriage:				
0468	2 nos 6mm dia. reinf.=2x5.8 Kg. =11.60 Kg.	Tonne	0.01160	₹ 110.94	₹ 1.29
	c. Labours (extra):				
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,345.59	₹ 13.46
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,359.05	₹ 40.77
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,399.82	₹ 209.97
				Total	₹ 1,609.79
	Total cost for 1 Cum				₹ 536.60
				Say,	₹ 536.60

6.18.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3 cum.	Cum.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.= 2x5.8 Kg. =11.60 Kg.	Qtl.	0.116	₹ 4,055.00	₹ 470.38
	Cement mortar (extra) 1:4	Cum	0.200	₹ 3,184.67	₹ 636.93
	b. Carriage:				
0468	2 nos 6mm dia. reinf.=2x5.8 Kg. =11.60 Kg.	Tonne	0.01160	₹ 110.94	₹ 1.29
	c. Labours (extra):				
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,184.10	₹ 11.84
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,195.94	₹ 35.88
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,231.82	₹ 184.77
				Total	₹ 1,416.59
	Total cost for 1 Cum				₹ 472.20
				Say,	₹ 472.20

6.18.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3 cum.	Cum.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.= 2x5.8 Kg. =11.60 Kg.	Qtl.	0.1160	₹ 4,055.00	₹ 470.38
	Cement mortar (extra) 1:5	Cum	0.200	₹ 2,749.90	₹ 549.98
	b. Carriage:				
0468	2 nos 6mm dia. reinf.=2x5.8 Kg. =11.60 Kg.	Tonne	0.01160	₹ 110.94	₹ 1.29
	c. Labours (extra):				
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,097.15	₹ 10.97
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,108.12	₹ 33.24
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,141.36	₹ 171.20
				Total	₹ 1,312.56
	Total cost for 1 Cum				₹ 437.52
				Say,	₹ 437.50

6.18.5 In cement mortar 1:6 (1 cement : 6 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3 cum.	Cum.			
	a. Materials:				

05038	2 nos 6mm dia. reinf.= 2x5.8 Kg. =11.60 Kg.	Qtl.	0.1160	₹ 4,055.00	₹ 470.38
	Cement mortar (extra) 1:6	Cum	0.2000	₹ 2,377.25	₹ 475.45
	b. Carriage:				
0468	2 nos 6mm dia. reinf.=2x5.8 Kg. =11.60 Kg.	Tonne	0.01160	₹ 110.94	₹ 1.29
	c. Labours (extra):				
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,022.62	₹ 10.23
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,032.85	₹ 30.99
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,063.84	₹ 159.58
				Total	₹ 1,223.42
	Total cost for 1 Cum				₹ 407.81
				Say,	₹ 407.80

6.19 Extra for providing & placing in position 2 nos 6mm dia MS bars at every 4th course of half brick masonry work including anchorage in joints of 75mm in each side in superstructure for all level including cost of all materials as required complete:-

6.19.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.	Qtl.	0.14520	₹ 4,055.00	₹ 588.79
	Cement mortar (extra) 1:2	Cum	0.200	₹ 5,011.28	₹ 1,002.26
	b. Carriage:				
0468	2 nos 6mm dia. reinf.= 14.52 Kg.	Tonne	0.01452	₹ 110.94	₹ 1.61
	c. Labours (extra):				
0219	Mason 1st Class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.12	₹ 300.00	₹ 36.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,682.66	₹ 16.83
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,699.49	₹ 50.98
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,750.47	₹ 262.57
				Total	₹ 2,013.04
	Total cost for 1 Sqm.				₹ 201.30
				Say,	₹ 201.30

6.20.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.	Qtl.	0.1452	₹ 4,055.00	₹ 588.79
	Cement mortar (extra) 1:3	Cum	0.200	₹ 3,992.09	₹ 798.42
	b. Carriage:				
0468	2 nos 6mm dia. reinf.= 14.52 Kg.	Tonne	0.01452	₹ 110.94	₹ 1.61
	c. Labours (extra):				
0219	Mason 1st Class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.12	₹ 300.00	₹ 36.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,478.82	₹ 14.79
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,493.61	₹ 44.81
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,538.42	₹ 230.76
				Total	₹ 1,769.18
	Total cost for 1 Sqm.				₹ 176.92
				Say,	₹ 176.90

6.20.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.	Qtl.	0.1452	₹ 4,055.00	₹ 588.79
	Cement mortar (extra) 1:4	Cum	0.200	₹ 3,184.67	₹ 636.93
	b. Carriage:				
0468	2 nos 6mm dia. reinf.= 14.52 Kg.	Tonne	0.01452	₹ 110.94	₹ 1.61
	c. Labours (extra):				
0219	Mason 1st Class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.12	₹ 300.00	₹ 36.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,317.33	₹ 13.17
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,330.50	₹ 39.92
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,370.42	₹ 205.56
				Total	₹ 1,575.98
	Total cost for 1 Sqm.				₹ 157.60
				Say,	₹ 157.60

6.20.4 In cement mortar 1:5(1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.	Qtl.	0.1452	₹ 4,055.00	₹ 588.79
	Cement mortar (extra) 1:5	Cum	0.200	₹ 2,749.90	₹ 549.98
	b. Carriage:				
0468	2 nos 6mm dia. reinf.= 14.52 Kg.	Tonne	0.01452	₹ 110.94	₹ 1.61
	c. Labours (extra):				
0219	Mason 1st Class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.12	₹ 300.00	₹ 36.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,230.38	₹ 12.30
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,242.68	₹ 37.28
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,279.96	₹ 191.99
				Total	₹ 1,471.95
	Total cost for 1 Sqm.				₹ 147.20
				Say,	₹ 147.20

6.20.5 In cement mortar 1:6 (1 cement : 6 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.	Qtl.	0.1452	₹ 4,055.00	₹ 588.79
	Cement mortar (extra) 1:6	Cum	0.200	₹ 2,377.25	₹ 475.45
	b. Carriage:				
0468	2 nos 6mm dia. reinf.= 14.52 Kg.	Tonne	0.01452	₹ 110.94	₹ 1.61
	c. Labours (extra):				
0219	Mason 1st Class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.12	₹ 300.00	₹ 36.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,155.85	₹ 11.56
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,167.41	₹ 35.02
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,202.43	₹ 180.36
				Total	₹ 1,382.79
	Total cost for 1 Sqm.				₹ 138.28
				Say,	₹ 138.30

6.20 Extra for providing & placing in position 2 nos 6mm dia reinforcement at every 3rd course of 75mm thick brick masonry work including anchorage in joints of 75mm in each side in superstructure for all level including cost of all materials as required complete:-

6.20.1 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Materials:				
05038	2 nos 6mm dia. reinf.	Qtl.	0.1900	₹ 4,055.00	₹ 770.45
	Cement mortar (extra) 1:3	Cum	0.160	₹ 3,992.09	₹ 638.73
	b. Carriage:				
0468	2 nos 6mm dia. reinf.= 12.76 Kg.	Tonne	0.0190	₹ 110.94	₹ 2.11
	c. Labours (extra):				
0219	Mason 1st Class	Day	0.09	₹ 425.00	₹ 38.25
0220	Mate	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	d. Water charges: @ 1% on total.	1%	on	₹ 1,479.54	₹ 14.80
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,494.34	₹ 44.83
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,539.17	₹ 230.88
				Total	₹ 1,770.05
	Total cost for 1 Sqm.				₹ 177.01
				Say,	₹ 177.00

6.21 Extra for laying brick work in or under water and/ or liquid mud including cost of pumping and/ or boiling out water and removing slush etc. as required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for depth of water = 0.30Mtr. & Quantity of concrete = 14 Cum.	Cum per Mtr.depth			
	Pumping hours = 3 hrs. or 0.375 working day.				
0117	a. Machinery: Hire charge of pump set of capacity 4000 ltr/hr.	Day	0.375	₹ 636.00	₹ 238.50
0203	b. Labour: Beldar (for cleaning slush)	Day	4.00	₹ 300.00	₹ 1,200.00
	c. Water charges : @ 1% on total.	1%	on	₹ 1,438.50	₹ 14.39
	d. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,452.89	₹ 43.59
	e. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,496.48	₹ 224.47
		[Cost of 14 cum.		Total	₹ 1,720.95
		Cost of 1 Cum. per Mtr. depth			₹ 409.75
				Say,	₹ 409.80

Note:- The quantity will be calculated by multiplying the depth of the bottom of concrete below sub-soil water level with quantity of concrete in Cum. for the same depth. In case of varying depth (of bottom of concrete) respective depth shall be multiplied with corresponding quantities of concrete.

6.22 Extra for forming cavity 50mm to 75mm wide in cavity walls with necessary weep and vent holes in superstructure for all level including use of cores and cost of providing and fixing bitumastic coated M .S. ties 300mm long of 25x3mm section at not less than 4 ties per sqm as per approved design & as required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10sqm. [Area of one of the two leaves of the cavity wall]	Sqm.			
	a. Materials :				
05026	Mild steel 25mm x 3mm section 300mm long 40nos. [Total 12 metres @ 0.6kg/m = 7.20 kg]	Quintal	0.072	₹ 3,992.00	₹ 287.42
	Painting the steel Bitumen	L.S	18.00	₹ 1.00	₹ 18.00
	Add for use of Core	L.S	6.00	₹ 1.00	₹ 6.00
	b. Carriage:				
0468	Mild steel	Tonne	0.0072	₹ 110.94	₹ 0.80

	c. Labours: [Extra labour for keeping cavity clear and fixing wall ties and delay caused:]				
0219	Mason 1st class	Day	0.37	₹ 425.00	₹ 157.25
0220	Mason 2nd Class	Day	0.37	₹ 380.00	₹ 140.60
0203	Beldar	Day	0.92	₹ 300.00	₹ 276.00
	d. Water charges: @ 1% on total ex/c LS.	1%	on	₹ 862.07	₹ 8.62
	e. Sundries & contingencies: @ 3% on total ex/c LS.	3%	on	₹ 870.69	₹ 26.12
	f. Contractor's profit & overheads: @ 15% on total ex/c LS.	15%	on	₹ 896.81	₹ 134.52
		Cost of 10 sqm.	Total	₹ 1,055.33	
		Cost of 1 sqm.	=	₹ 105.53	
			Say,	₹ 105.50	

Note: Cavity walls shall not normally be built more than 7.5 metre in height and 9 metre in length. Where large lengths and heights are desired, the wall shall be divided into panels with strengthening measures such as pillars etc. Cavity shall be covered at the top with at least two courses of masonry unit and/or a coping over it. Metal ties/bonding units shall be spaced not more than 900 mm apart horizontally and 450 mm vertically and staggered in each course. Additional ties shall be used near openings. Otherwise, RCC (preferably precast) units shall be provided with 2 no. 6 mm mild steel reinforcement bars tied with 2 no. 3 mm. dia. M.S. wire/hard drawn wire cross bars placed in the centre of units where cement concrete used shall not be leaner than 1:3:6 (1 cement : 3 fine sand : 6 graded stone aggregate 20 mm nominal size).

- 6.23 Providing half brick masonry with 1st class bricks in cement mortar 1:3 (1 cement : 3 fine sand) in superstructure for all level for closing cavity 50 to 75 mm wide in cavity wall complete with 100mm / 114mm wide bitumen felt type 3 grade 1 as per approved design & as required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10m.	Mtr.			
	a. Materials :				
	Half brick masonry 1:3 [(average) 1 x 10 x 0.29 = 2.9 Sqm.] Rate as per item No.6.12.1 ['A']	Sqm	2.90	₹ 833.55	₹ 2,417.30
06003	Bitumen felt type- 3 grade 1 [I/c wastage & overlapping : 1 x 10m x 0.114m x 1.05 = 1.14 sqm.x1.05 = 1.20 sqm.]	Sqm	1.20	₹ 70.00	₹ 84.00
	b. Carriage:				
0472	Bitumen felt type- 3 grade 1 = 1.20 sqm.]	Tonne	0.0054	₹ 110.94	₹ 0.60
	c. Labour:				
0219	Mason 1st class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mason 2nd class	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	0.06	₹ 300.00	₹ 18.00
	d. Water charges: @ 1% on total ex/c A.	1%	on	₹ 199.20	₹ 1.99
	e. Sundries & contingencies: @ 3% on total ex/c A.	3%	on	₹ 201.19	₹ 6.04
	f. Contractor's profit & overheads: @ 15% on total ex/c A.	15%	on	₹ 207.23	₹ 31.08
			Total	₹ 2,655.61	
	Cost of 1 m.		=	₹ 265.56	
			Say,	₹ 265.60	

- 6.24 Honey comb brick work of half brick thickness with first class bricks in superstructure for all level including cost of all materials as required complete:-

6.24.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials etc.:				
06001	1st class bricks.	1000 Nos	347	₹ 8,027.00	₹ 2,785.37
	Cement mortar 1:2 (Rate as per item No. 3.1.2)	Cum	0.190	₹ 5,011.28	₹ 952.14

	b. Carriage:				
0406	1st class bricks.	1000 Nos	347	₹ 332.82	₹ 115.49
	c. Labours (extra):				
0219	Mason 1st Class	Day	1.00	₹ 425.00	₹ 425.00
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0203	Belder(Male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (Female)	Day	1.35	₹ 300.00	₹ 405.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	d. Scaffolding etc @ 0.50% on total.	0.50%	on	₹ 4,959.00	₹ 24.80
	e. Water charges: @ 1% on total.	1%	on	₹ 4,983.80	₹ 49.84
	f. Sundries & Contingencies: @ 3% on total.	3%	on	₹ 5,033.64	₹ 151.01
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 5,184.65	₹ 777.70
				Total	₹ 5,962.35
	Total cost for 1 Sqm				₹ 596.24
				Say,	₹ 596.20

6.24.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials etc.:				
06001	1st class bricks.	1000 Nos	347	₹ 8,027.00	₹ 2,785.37
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.190	₹ 3,992.09	₹ 758.50
	b. Carriage:				
0406	1st class bricks.	1000 Nos	347	₹ 332.82	₹ 115.49
	c. Labours (extra):				
0219	Mason 1st Class	Day	1.00	₹ 425.00	₹ 425.00
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0203	Belder(Male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (Female)	Day	1.35	₹ 300.00	₹ 405.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	d. Scaffolding etc @ 0.53% on total.	0.53%	on	₹ 4,765.36	₹ 25.26
	e. Water charges: @ 1% on total.	1%	on	₹ 4,790.62	₹ 47.91
	f. Sundries & Contingencies: @ 3% on total.	3%	on	₹ 4,838.53	₹ 145.16
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,983.69	₹ 747.55
				Total	₹ 5,731.24
	Total cost for 1 Sqm				₹ 573.12
				Say,	₹ 573.10

6.24.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials etc.:				
06001	1st class bricks.	1000 Nos	347	₹ 8,027.00	₹ 2,785.37
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.190	₹ 3,184.67	₹ 605.09
	b. Carriage:				
0406	1st class bricks.	1000 Nos	347	₹ 332.82	₹ 115.49
	c. Labours (extra):				
0219	Mason 1st Class	Day	1.00	₹ 425.00	₹ 425.00
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0203	Belder(Male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (Female)	Day	1.35	₹ 300.00	₹ 405.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	d. Scaffolding etc @ 0.55% on total.	0.55%	on	₹ 4,611.95	₹ 25.37
	e. Water charges: @ 1% on total.	1%	on	₹ 4,637.32	₹ 46.37
	f. Sundries & Contingencies: @ 3% on total.	3%	on	₹ 4,683.69	₹ 140.51
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,824.20	₹ 723.63
				Total	₹ 5,547.83
	Total cost for 1 Sqm				₹ 554.78
				Say,	₹ 554.80

6.24.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. Materials etc.:				
06001	1st class bricks.	1000 Nos	347	₹ 8,027.00	₹ 2,785.37
	Cement mortar 1:5 (Rate as per item No. 3.1.5)	Cum	0.190	₹ 2,749.90	₹ 522.48
	b. Carriage:				
0406	1st class bricks.	1000 Nos	347	₹ 332.82	₹ 115.49
	c. Labours (extra):				
0219	Mason 1st Class	Day	1.00	₹ 425.00	₹ 425.00
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0203	Belder(Male)	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie (Female)	Day	1.35	₹ 300.00	₹ 405.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	d. Scaffolding etc @ 0.56% on total.	0.56%	on	₹ 4,529.34	₹ 25.36
	e. Water charges: @ 1% on total.	1%	on	₹ 4,554.70	₹ 45.55
	f. Sundries & Contingencies: @ 3% on total.	3%	on	₹ 4,600.25	₹ 138.01
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,738.26	₹ 710.74
				Total	₹ 5,449.00
	Total cost for 1 Sqm				₹ 544.90
				Say,	₹ 544.90

6.25 Moulding and cornices with first class brick masonry, girth to be measured in centimetre and length in metre in superstructure for all level including cost of all materials as required complete:-

6.25.1 In cement mortar 1:2 (1 cement : 2 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Mtr length & 62 Cm girth	Mtr / Cm			
	a. Materials, carriage etc.:				
	1st class B.W. in C.M.1:2 in super structure item	Cum	0.560	₹ 6,471.80	₹ 3,624.21
	b. Labours (extra & i/c 1/6 th day efficiency) :				
0219	Mason 1st Class	Day	1.85	₹ 425.00	₹ 786.25
0220	Mason 2nd Class	Day	0.15	₹ 380.00	₹ 57.00
0224	Mate	Day	0.15	₹ 300.00	₹ 45.00

0203	Belder(Male)	Day	1.85	₹	300.00	₹	555.00
	c. Scaffolding etc @ 2% on total ex/c "A".	2.00%	on	₹	1,443.25	₹	28.87
	d. Water charges: @ 1% on total.	1%	on	₹	1,472.12	₹	14.72
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹	1,486.84	₹	44.61
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	1,531.45	₹	229.72
					Total	₹	5,385.38
	Total cost for 1 Mtr/ Cm					₹	8.69
					Say,	₹	8.70

6.25.2 In cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Mtr length & 62 Cm girth	Mtr / Cm			
	a. Materials, carriage etc.:				
	1st class B.W. in C.M.1:3 in super structure item	Cum	0.560	₹ 6,168.90	₹ 3,454.58
	b. Labours (extra & i/c 1/6 th day efficiency):				
0219	Mason 1st Class	Day	1.85	₹ 425.00	₹ 786.25
0220	Mason 2nd Class	Day	0.15	₹ 380.00	₹ 57.00
0224	Mate	Day	0.15	₹ 300.00	₹ 45.00
0203	Belder(Male)	Day	1.85	₹ 300.00	₹ 555.00
	c. Scaffolding etc @ 2% on total ex/c "A".	2.00%	on	₹ 1,443.25	₹ 28.87
	d. Water charges: @ 1% on total.	1%	on	₹ 1,472.12	₹ 14.72
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,486.84	₹ 44.61
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,531.45	₹ 229.72
				Total	₹ 5,215.75
	Total cost for 1 Mtr/ Cm				₹ 8.41
				Say,	₹ 8.40

6.25.3 In cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Mtr length & 62 Cm girth	Mtr / Cm			
	a. Materials, carriage etc.:				
	1st class B.W. in C.M.1:4 in super structure item	Cum	0.560	₹ 5,930.80	₹ 3,321.25
	b. Labours (extra & i/c 1/6 th day efficiency) :				
0219	Mason 1st Class	Day	1.85	₹ 425.00	₹ 786.25
0220	Mason 2nd Class	Day	0.15	₹ 380.00	₹ 57.00
0224	Mate	Day	0.15	₹ 300.00	₹ 45.00
0203	Belder(Male)	Day	1.85	₹ 300.00	₹ 555.00
	c. Scaffolding etc @ 2% on total ex/c "A".	2.00%	on	₹ 1,443.25	₹ 28.87
	d. Water charges: @ 1% on total.	1%	on	₹ 1,472.12	₹ 14.72
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,486.84	₹ 44.61
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,531.45	₹ 229.72
				Total	₹ 5,082.42
	Total cost for 1 Mtr/ Cm				₹ 8.20
				Say,	₹ 8.20

6.25.4 In cement mortar 1:5 (1 cement : 5 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Mtr length & 62 Cm girth	Mtr / Cm			
	a. Materials, carriage etc.:				
	1st class B.W. in C.M.1:5 in super structure item "A"	Cum	0.560	₹ 5,800.20	₹ 3,248.11
	b. Labours (extra & i/c 1/6 th day efficiency) :				
0219	Mason 1st Class	Day	1.85	₹ 425.00	₹ 786.25
0220	Mason 2nd Class	Day	0.15	₹ 380.00	₹ 57.00
0224	Mate	Day	0.15	₹ 300.00	₹ 45.00
0203	Belder(Male)	Day	1.85	₹ 300.00	₹ 555.00
	c. Scaffolding etc @ 2% on total ex/c "A".	2.00%	on	₹ 1,443.25	₹ 28.87
	d. Water charges: @ 1% on total ex/c "A".	1%	on	₹ 1,472.12	₹ 14.72

	e. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 1,486.84	₹ 44.61
	f. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 1,531.45	₹ 229.72
				Total	₹ 5,009.28
	Total cost for 1 Mtr/ Cm				₹ 8.08
				Say,	₹ 8.10

6.26 Providing and laying gypsum panel partitions 100 mm thick with water proof gypsum panels / blocks of size 666 x 500 x 100 mm having minimum compressive strength of 9.3 kg / sq.cm., made of calcite phosphor gypsum fixed with tongue and groove, jointed with bonding plaster as per manufacturers specifications in super structure above plinth level upto floor five level including cost of all materials required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Materials:				
06004	Gypsum panel 666 X 500 X 100 mm size.	Sqm.	10.00	₹ 800.00	₹ 8,000.00
06005	Bonding plaster for gypsum panel.	Kg.	25.00	₹ 78.00	₹ 1,950.00
	b. Labours:				
0219	Mason 1st Class	Day	0.50	₹ 425.00	₹ 212.50
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	1.00	₹ 300.00	₹ 300.00
	c. Carrage, scaffolding etc @ 1.0% on total (LS)	1.00%	on	₹ 10,480.50	₹ 104.81
	d. Water charges & electricity charges: @ 1.5% on total.	1.5%	on	₹ 10,585.31	₹ 158.78
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 10,744.09	₹ 322.32
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 11,066.41	₹ 1,659.96
				Total	₹ 12,726.37
	Total cost for 1 sqm.				₹ 1,272.64
				Say,	₹ 1,272.60

6.27 Extra for providing & laying gypsum panel partitions in superstructure above floor five level for every four floors or part thereof including cost of all materials required complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	b. Labours:(Extra labour element for lifting of materials etc.)				
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0212	Coolie	Day	2.25	₹ 300.00	₹ 675.00
	d. Water charges & electricity charges: @ 1.5% on total.	1.5%	on	₹ 693.00	₹ 10.40
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 703.40	₹ 21.10
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 724.50	₹ 108.68
				Total	₹ 833.18
	Total cost for 1 sqm.				₹ 83.32
				Say,	₹ 83.30

6.28 Providing and laying precast cement concrete solid blocks (Grey brick: conforming to IS 2185) masonry in boundary wall, retaining wall in cement mortar 1 : 4 (1 cement : 4 fine sand).

6.28.1 Size: 235 mm x 115 mm x 75 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	Cum.			
	a. Materials:				
06006	Cement concrete solid blocks	1000 Nos	517	₹ 10,000.00	₹ 5,170.00
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.150	₹ 2,749.90	₹ 412.49
	b. Carriage:				
0406	Bricks.	1000 Nos	517	₹ 332.82	₹ 172.07
	c. Labours:				
0219	Mason 1st Class	Day	0.40	₹ 425.00	₹ 170.00
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0203	Belder	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie (female)	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges: @ 1% on total.	1%	on	₹ 6,302.56	₹ 63.03
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 6,365.59	₹ 190.97
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 6,556.56	₹ 983.48
				Total	₹ 7,540.04
	Total cost for 1 Cum			Say,	₹ 7,540.00

S U B - H E A D - 7



M A R B L E & G R A N I T E W O R K

SUB HEAD : 7.0/ MARBLE & GRANITE WORK
BASIC RATES

Code No.	Description	Unit	Rate
0120	Machine for rubbing of floors	Day	₹ 380.00
0105	Hand Grinder for mirror polish	Day	₹ 285.00
0201	Bandhani	Day	₹ 300.00
0205	Bhisti	Day	₹ 300.00
0206	Blacksmith 1st class	Day	₹ 425.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0222	Mason (for plain stone work) 2nd class	Day	₹ 380.00
0221	Mason (for ornamental stone work) 1st class	Day	₹ 425.00
0224	Mate	Day	₹ 300.00
0234	Skilled Belder (for floor rubbing etc.)	Day	₹ 380.00
03001	Portland Cement	tonne	₹ 6,100.00
05017	Bolts and nuts upto 300 mm in length	qtl	₹ 5,200.00
07001	8 mm thick granite stone tiles (mirror polished of all shades)	Sqm	₹ 825.00
10002	8 mm thick marble tiles (polished) Raj Nagar	Sqm	₹ 435.00
07008	Table rubbed polished stone 18 mm thick (75x50cm) Agaria Marble stone - 18 mm thick	Sqm	₹ 1,950.00
07009	Table rubbed polished stone 18mm thick (75x50cm) Granite stone - 18mm thick	Sqm	₹ 1,950.00
07004	Gun metal cramp	kg	₹ 350.00
07007	Stainless steel cramp	kg	₹ 330.00
07011	Wedge expansion hold fastener 1/4" or 6 mm	Each	₹ 14.00
07012	Wedge expansion hold fastener 3/8" or 10 mm	Each	₹ 16.00

Code No.	Description	Unit	Rate
07010	Wedge expansion hold fastener 1/2" or 12 mm	Each	₹ 31.00
07006	Raj nagar plain white marble (table rubbed and polished) 18 mm thick upto 0.50 sqm	Sqm	₹ 850.00
07005	Raj nagar plain white marble (table rubbed and polished) 18 mm thick above 0.50 sqm	Sqm	₹ 950.00
07003	Granite of any colour, 18 mm thick slab, upto 0.50 sqm (areawise)	Sqm	₹ 2,000.00
07002	Granite of any colour, 18 mm thick slab, above 0.50 sqm (areawise)	Sqm	₹ 2,050.00
07013	Raj nagar plain white marble (table rubbed and polished) 14 mm thick upto 0.50 sqm	Sqm	₹ 600.00
07014	Raj nagar plain white marble (table rubbed and polished) 14 mm thick above 0.50 sqm	Sqm	₹ 700.00
07015	Granite of any colour, 14 mm thick slab, upto 0.50 sqm (areawise)	Sqm	₹ 1,700.00
07016	Granite of any colour, 14 mm thick slab, above 0.50 sqm (areawise)	Sqm	₹ 1,750.00
07017	Table rubbed polished stone 14 mm thick (75x50cm) Agaria Marble stone - 14 mm thick	Sqm	₹ 1,550.00
07018	Table rubbed polished stone 14mm thick (75x50cm) Granite stone - 14mm thick	Sqm	₹ 1,550.00
07019	18 mm thick Italian Marble stone slab, Perlato (slab area up to 0.5 sqm)	Sqm	₹ 3,450.00
07020	18 mm thick Flamed finish granite stone slab	Sqm	₹ 1,950.00
0468	Carriage: Steel	Tonne	₹ 110.94
0421	Carriage: Cement	Tonne	₹ 110.94
0454	Carriage: Stone blocks white & red sand stone & kota stone slab, marble	Tonne	₹ 110.94

SUB HEAD : 7.0
MARBLE WORK

- 1 All marble stones shall be wetted before placing in position. These shall then be floated on mortar and bedded properly in position with wooden mallets without the use of chips or under pinning of any sort. Green work shall be protected from the effects of sun and rain by suitable covering .
- 2 After the marble work is cured, it shall be rubbed with carborandum stone of different grades no. 60, 120 and 320 in succession or with electrical rubbing machines rubbed with carborandum items 0 to 6 nos.in succession, so as to give a plane true and highly smooth surface. It shall then be cleaned with a solution of oxalic acid, washed and finished clean.
- 3 All other specification for quality, sampling and tests etc. shall generally be as per chapter - 8 of CPWD's specification.

7.1 Marble work gang saw cut (polished and machine cut) of approved thickness for wall lining (veneer work), backing filled with a grout of average 12 mm thick cement mortar 1:3 (1 cement : 3 fine sand) including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade: (to be secured to the backing by means of cramps, which shall be paid for separately), including rubbing, curing etc. complete at all levels as required:-

7.1.1 18 mm thick Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble or equivalent duly approved:-

7.1.1.1 Area of slab upto 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.50 sqm.	Sqm.			
	Rajnagar plain white marble (polished and machine cut) etc.= 0.50 sqm.+20% for wastage 0.10 sqm.= 0.60sqm				
	a. Materials:				
07006	Rajnagar plain white marble (polished and machine cut) etc. 18 mm thick upto 0.50 sqm	Sqm.	0.60	₹ 850.00	₹ 510.00
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.01	₹ 3,992.09	₹ 31.94
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.00	₹ 16,378.86	₹ 19.65
	b. Carriage:				
0454	Rajnagar plain white marble (polished and machine cut) etc.18 mm thick upto 0.500sqm	Tonne	0.03	₹ 110.94	₹ 3.33
	c. Labours:				
0221	Stone Mason (ornamental)	Day	0.34	₹ 425.00	₹ 142.38
0201	Bandhani	Day	0.34	₹ 300.00	₹ 100.50
0203	Beldar	Day	0.34	₹ 300.00	₹ 100.50
0212	Coolie	Day	0.34	₹ 300.00	₹ 100.50
0205	Bhishti	Day	0.34	₹ 300.00	₹ 100.50
0224	Mate	Day	0.17	₹ 300.00	₹ 49.50
0206	Blacksmith 1st class	Day	0.14	₹ 425.00	₹ 57.38
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,216.18	₹ 18.24
	e. Sundries (admixture of pigment, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 1,234.42	₹ 37.03
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 1,271.45	₹ 190.72
				Total	₹ 1,462.17
		Total cost for 1 Sqm.			₹ 2,924.34
				Say,	₹ 2,924.30

7.1.1.2 Area of slab over 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 sqm.	Sqm.			
	Rajnagar plain white marble (polished and machine cut) etc.=1.00 sqm.+ 20 % for wastage 0.20 sqm.= 1.20sqm				
	a. Materials:				
07005	Rajnagar plain white marble (polished and machine cut) etc. 18 mm thick over 0.50sqm	Sqm.	1.20	₹ 950.00	₹ 1,140.00
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.01	₹ 3,992.09	₹ 55.89
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.00	₹ 16,378.86	₹ 40.95
	b. Carriage:				
0454	Rajnagar plain white marble (polished and machine cut) etc. 18 mm thick over 0.50sqm	Tonne	0.06	₹ 110.94	₹ 6.66
	c. Labours:				
0221	Stone Mason (ornamental)	Day	0.67	₹ 425.00	₹ 284.75
0201	Bandhani	Day	0.67	₹ 300.00	₹ 201.00
0203	Beldar	Day	0.67	₹ 300.00	₹ 201.00
0212	Coolie	Day	0.67	₹ 300.00	₹ 201.00
0205	Bhishti	Day	0.67	₹ 300.00	₹ 201.00
0224	Mate	Day	0.33	₹ 300.00	₹ 99.00
0206	Blacksmith 1st class	Day	0.27	₹ 425.00	₹ 114.75
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 2,546.00	₹ 38.19
	e. Sundries (admixture of pigment, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 2,584.19	₹ 77.53
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 2,661.72	₹ 399.26
		Total cost for 1 Sqm.		Total	₹ 3,060.98
				Say,	₹ 3,061.00

7.1.2 14 mm thick Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble or equivalent duly approved:-**7.1.2.1 Area of slab upto 0.50 sqm.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.50 sqm.	Sqm.			
	Rajnagar plain white marble (polished and machine cut) etc.= 0.50 sqm.+20% for wastage 0.10 sqm.= 0.60sqm				
	a. Materials:				
07013	Raj nagar plain white marble (table rubbed and polished) 14 mm thick upto 0.50 sqm	Sqm.	0.60	₹ 600.00	₹ 360.00
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.01	₹ 3,992.09	₹ 31.94
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.00	₹ 16,378.86	₹ 19.65
	b. Carriage:				
0454	Rajnagar plain white marble (polished and machine cut) etc.14 mm thick upto 0.500sqm	Tonne	0.03	₹ 110.94	₹ 3.33
	c. Labours:				
0221	Stone Mason (ornamental)	Day	0.34	₹ 425.00	₹ 142.38
0201	Bandhani	Day	0.34	₹ 300.00	₹ 100.50
0203	Beldar	Day	0.34	₹ 300.00	₹ 100.50
0212	Coolie	Day	0.34	₹ 300.00	₹ 100.50
0205	Bhishti	Day	0.34	₹ 300.00	₹ 100.50
0224	Mate	Day	0.17	₹ 300.00	₹ 49.50
0206	Blacksmith 1st class	Day	0.14	₹ 425.00	₹ 57.38
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,066.18	₹ 15.99
	e. Sundries (admixture of pigment, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 1,082.17	₹ 32.47
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 1,114.64	₹ 167.20

				Total	₹ 1,281.84
		Total cost for 1 Sqm.			₹ 2,563.68
				Say,	₹ 2,563.70

7.1.2.2 Area of slab over 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 sqm.	Sqm.			
	Rajnagar plain white marble (polished and machine cut) etc.=1.00 sqm.+ 20 % for wastage 0.20 sqm.= 1.20sqm				
	a. Materials:				
07014	Raj nagar plain white marble (table rubbed and polished) 14 mm thick above 0.50 sqm	Sqm.	1.20	₹ 700.00	₹ 840.00
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.01	₹ 3,992.09	₹ 57.49
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.00	₹ 16,378.86	₹ 40.95
	b. Carriage:				
0454	Rajnagar plain white marble (polished and machine cut) etc. 14 mm thick over 0.50sqm	Tonne	0.06	₹ 110.94	₹ 6.66
	c. Labours:				
0221	Stone Mason (ornamental)	Day	0.67	₹ 425.00	₹ 284.75
0201	Bandhani	Day	0.67	₹ 300.00	₹ 201.00
0203	Beldar	Day	0.67	₹ 300.00	₹ 201.00
0212	Coolie	Day	0.67	₹ 300.00	₹ 201.00
0205	Bhishti	Day	0.67	₹ 300.00	₹ 201.00
0224	Mate	Day	0.33	₹ 300.00	₹ 99.00
0206	Blacksmith 1st class	Day	0.27	₹ 425.00	₹ 114.75
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 2,247.60	₹ 33.71
	e. Sundries (admixture of pigment, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 2,281.31	₹ 68.44
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 2,349.75	₹ 352.46
		Total cost for 1 Sqm.		Total	₹ 2,702.21
				Say,	₹ 2,702.20

7.2 Providing and fixing gang saw cut of approved thickness mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base of cement mortar 1:4 (1 cement : 4 fine sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing , curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels:-

7.2.1 18 mm thick Rajnagar Plain white marble/ Udaipur green marble/ Zebra black marble or equivalent duly approved:-

7.2.1.1 Area of slab upto 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.50 sqm.	Sqm.			
	Rajnagar plain white marble (polished and machine cut) etc.= 0.50 sqm.+5% for wastage 0.025 sqm.= 0.525sqm				
	a. Materials:				
07006	Rajnagar plain white marble (polished and machine cut) etc. 18 mm thick upto 0.50sqm	Sqm.	0.525	₹ 850.00	₹ 446.25
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.01	₹ 3,184.67	₹ 38.22
	b. Carriage:				
0454	Rajnagar plain white marble (polished and machine cut) etc. 18 mm thick upto 0.500sqm	Tonne	0.03	₹ 110.94	₹ 2.88
	c. Labours:				
0219	Mason (brick layer) 1st class	Day	0.48	₹ 425.00	₹ 204.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0212	Coolie	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 811.35	₹ 12.17

	e. Sundries (moulding and edge polishing, epoxy resin, cutting machine, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 823.52	₹ 24.71
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 848.23	₹ 127.23
				Total	₹ 975.46
		Total cost for 1 Sqm.			₹ 1,950.92
				Say,	₹ 1,950.90

7.2.1.2 Area of slab over 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 sqm.	Sqm.			
	Rajnagar plain white marble (polished and machine cut) etc.=1.00 sqm.+5% for wastage 0.05 sqm.= 1.05sqm				
	a. Materials:				
07005	Rajnagar plain white marble (polished and machine cut) etc. 18 mm thick over 0.500 sqm	Sqm.	1.05	₹ 950.00	₹ 997.50
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.02	₹ 3,184.67	₹ 76.43
	b. Carriage:				
0454	Rajnagar plain white marble (polished and machine cut) etc. 18 mm thick over 0.500 sqm	Tonne	0.05	₹ 110.94	₹ 5.88
	c. Labours:				
0219	Mason (brick layer) 1st class	Day	0.72	₹ 425.00	₹ 306.00
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,565.81	₹ 23.49
	e. Sundries (moulding and edge polishing, epoxy resin, cutting machine, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 1,589.30	₹ 47.68
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 1,636.98	₹ 245.55
		Total cost for 1 Sqm.			Total ₹ 1,882.53
				Say,	₹ 1,882.50

7.2.2 14 mm thick Rajnagar Plain white marble/ Udaipur green marble/ Zebra black marble or equivalent duly approved:-

7.2.2.1 Area of slab upto 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.50 sqm.	Sqm.			
	Rajnagar plain white marble (polished and machine cut) etc.= 0.50 sqm.+5% for wastage 0.025 sqm.= 0.525sqm				
	a. Materials:				
07013	Rajnagar plain white marble (polished and machine cut) etc. 14 mm thick upto 0.50sqm	Sqm.	0.525	₹ 600.00	₹ 315.00
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.01	₹ 3,184.67	₹ 38.22
	b. Carriage:				
0454	Rajnagar plain white marble (polished and machine cut) etc. 14 mm thick upto 0.500sqm	Tonne	0.03	₹ 110.94	₹ 2.88
	c. Labours:				
0219	Mason (brick layer) 1st class	Day	0.48	₹ 425.00	₹ 204.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0212	Coolie	Day	0.20	₹ 300.00	₹ 60.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 680.10	₹ 10.20
	e. Sundries (moulding and edge polishing, epoxy resin, cutting machine, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 690.30	₹ 20.71

	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 711.01	₹ 106.65
				Total	₹ 817.66
		Total cost for 1 Sqm.			₹ 1,635.32
				Say,	₹ 1,635.30

7.2.2.2 Area of slab over 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 sqm.	Sqm.			
	Rajnagar plain white marble (polished and machine cut) etc.=1.00 sqm.+5% for wastage 0.05 sqm.= 1.05sqm				
	a. Materials:				
07014	Rajnagar plain white marble (polished and machine cut) etc. 14 mm thick over 0.500 sqm	Sqm.	1.05	₹ 700.00	₹ 735.00
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.02	₹ 3,184.67	₹ 76.43
	b. Carriage:				
0454	Rajnagar plain white marble (polished and machine cut) etc. 14 mm thick over 0.500 sqm	Tonne	0.05	₹ 110.94	₹ 5.88
	c. Labours:				
0219	Mason (brick layer) 1st class	Day	0.72	₹ 425.00	₹ 306.00
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,303.31	₹ 19.55
	e. Sundries (moulding and edge polishing, apoxy resin, cutting machine, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 1,322.86	₹ 39.69
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 1,362.55	₹ 204.38
		Total cost for 1 Sqm.		Total	₹ 1,566.93
				Say,	₹ 1,566.90

7.2.3 18 mm thick Granite of any colour and shade duly approved:-**7.2.3.1 Area of slab upto 0.50 sqm.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.50 sqm.	Sqm.			
	Mirror polished granite= 0.50 sqm.+5% for wastage 0.025 sqm.= 0.525sqm				
	a. Materials:				
07003	Granite 18 mm thick slab, upto 0.50 sqm etc.	Sqm.	0.525	₹ 2,000.00	₹ 1,050.00
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.01	₹ 3,184.67	₹ 38.22
	b. Carriage:				
0454	Granite 18 mm thick slab, upto 0.50 sqm etc.	Tonne	0.03	₹ 110.94	₹ 2.88
	c. Labours:				
0219	Mason (brick layer) 1st class	Day	0.48	₹ 425.00	₹ 204.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0212	Coolie	Day	0.20	₹ 300.00	₹ 60.00
	e. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,415.10	₹ 21.23
	e. Sundries (moulding and edge polishing, apoxy resin, cutting machine, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 1,436.33	₹ 43.09
	g. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 1,479.42	₹ 221.91
				Total	₹ 1,701.33
		Total cost for 1 Sqm.			₹ 3,402.66
				Say,	₹ 3,402.70

7.2.3.2 Area of slab over 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2.00 sqm.	Sqm.			
	Mirror polished granite=2.00 sqm.+5% for wastage 0.1 sqm.= 2.1sqm				
	a. Materials:				
07002	Granite 18 mm thick slab, over 0.50 sqm etc.	Sqm.	2.100	₹ 2,050.00	₹ 4,305.00
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.05	₹ 3,184.67	₹ 152.86
	b. Carriage:				
0454	Granite 18 mm thick slab, over 0.50 sqm etc.	Tonne	0.11	₹ 110.94	₹ 11.65
	c. Labours:				
0219	Mason (brick layer) 1st class	Day	1.44	₹ 425.00	₹ 612.00
0203	Beldar	Day	0.60	₹ 300.00	₹ 180.00
0212	Coolie	Day	0.60	₹ 300.00	₹ 180.00
	e. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 5,441.51	₹ 81.62
	e. Sundries (moulding and edge polishing, apoxy resin, cutting machine, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 5,523.13	₹ 165.69
	g. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 5,688.82	₹ 853.32
				Total	₹ 6,542.14
		Total cost for 1 Sqm.			₹ 3,271.07
				Say,	₹ 3,271.10

7.2.4 14 mm thick Granite of any colour and shade duly approved:-**7.2.4.1 Area of slab upto 0.50 sqm.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.50 sqm.	Sqm.			
	Mirror polished granite= 0.50 sqm.+5% for wastage 0.025 sqm.= 0.525sqm				
	a. Materials:				
07015	Granite 14 mm thick slab, upto 0.50 sqm etc.	Sqm.	0.525	₹ 1,700.00	₹ 892.50
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.01	₹ 3,184.67	₹ 38.22
	b. Carriage:				
0454	Granite 14 mm thick slab, upto 0.50 sqm etc.	Tonne	0.03	₹ 110.94	₹ 2.88
	c. Labours:				
0219	Mason (brick layer) 1st class	Day	0.48	₹ 425.00	₹ 204.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0212	Coolie	Day	0.20	₹ 300.00	₹ 60.00
	e. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,257.60	₹ 18.86
	e. Sundries (moulding and edge polishing, apoxy resin, cutting machine, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 1,276.46	₹ 38.29
	g. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 1,314.75	₹ 197.21
				Total	₹ 1,511.96
		Total cost for 1 Sqm.			₹ 3,023.92
				Say,	₹ 3,023.90

7.2.4.2 Area of slab over 0.50 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2.00 sqm.	Sqm.			
	Mirror polished granite=2.00 sqm.+5% for wastage 0.1 sqm.= 2.1sqm				
	a. Materials:				
07016	Granite 14 mm thick slab, over 0.50 sqm etc.	Sqm.	2.100	₹ 1,750.00	₹ 3,675.00
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.05	₹ 3,184.67	₹ 152.86
	b. Carriage:				
0454	Granite 14 mm thick slab, over 0.50 sqm etc.	Tonne	0.11	₹ 110.94	₹ 11.65
	c. Labours:				
0219	Mason (brick layer) 1st class	Day	1.44	₹ 425.00	₹ 612.00
0203	Beldar	Day	0.60	₹ 300.00	₹ 180.00

0212	Coolie	Day	0.60	₹ 300.00	₹ 180.00
	e. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 4,811.51	₹ 72.17
	e. Sundries (moulding and edge polishing, apoxy resin, cutting machine, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 4,883.68	₹ 146.51
	g. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 5,030.19	₹ 754.53
				Total	₹ 5,784.72
		Total cost for 1 Sqm.			₹ 2,892.36
				Say,	₹ 2,892.40

7.3 Providing edge moulding to approved thickness marble stone counters, vanities etc. including machine polishing to edge to give high gloss finish etc. complete at all levels as required as per design approved by the Engineer-in-charge:-

7.3.1 18 mm Marble work.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 mtr.	Mtr.			
	a. T&P and materials:				
0105	Hire charge of Hand Grinder for-mirror-polish	Day	1.50	₹ 285.00	₹ 427.50
	b. Labours:				
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
	c. Blades & polish etc. (LS)	15%	on	₹ 1,027.50	₹ 154.13
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,181.63	₹ 17.72
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,199.35	₹ 35.98
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 1,235.33	₹ 185.30
				Total	₹ 1,420.63
		Total cost for 1 Mtr.			₹ 142.06
				Say,	₹ 142.10

7.3.2 14 mm Marble work.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 mtr.	Mtr.			
	a. T&P and materials:				
0105	Hire charge of Hand Grinder for-mirror-polish	Day	1.00	₹ 285.00	₹ 285.00
	b. Labours:			₹ -	
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
	c. Blades & polish etc. (LS)	12%	on	₹ 735.00	₹ 88.20
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 823.20	₹ 12.35
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 835.55	₹ 25.07
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 860.62	₹ 129.09
				Total	₹ 989.71
		Total cost for 1 Mtr.			₹ 98.97
				Say,	₹ 99.00

7.3.3 18 mm thick Granite work.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 mtr.	Mtr.			
	a. T&P and materials:				
0105	Hire charge of Hand Grinder for-mirror-polish	Day	2.50	₹ 285.00	₹ 712.50
	b. Labours:				
0203	Beldar	Day	3.5	₹ 300.00	₹ 1,050.00
	c. Blades & polish etc. (LS)	15%	on	₹ 1,762.50	₹ 264.38
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 2,026.88	₹ 30.40
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 2,057.28	₹ 61.72
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 2,119.00	₹ 317.85

				Total	₹ 2,436.85
		Total cost for 1 Mtr.			₹ 243.69
				Say,	₹ 243.70

7.3.4 14 mm thick Granite work.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 mtr.	Mtr.			
	a. T&P and materials:				
0105	Hire charge of Hand Grinder for-mirror-polish	Day	2.00	₹ 285.00	₹ 570.00
	b. Labours:				
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	c. Blades & polish etc. (LS)	12%	on	₹ 1,762.50	₹ 211.50
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,974.00	₹ 29.61
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 2,003.61	₹ 60.11
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 2,063.72	₹ 309.56
				Total	₹ 2,080.78
		Total cost for 1 Mtr.			₹ 208.08
				Say,	₹ 208.10

7.4 Extra for fixing marble / granite stone over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive including cleaning etc. at all levels as required.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for facia 1.5m long and 0.15m wide.	Mtr.			
	a.Materials:				
	Cement mortar 1:4 (1 Cement: 4 fine sand)(Rate as per item No. 3.1.4) 1.5x0.15x0.02 = 0.005 cum..	Cum.	0.005	₹ 3,184.67	₹ 15.92
	b. Labours:				
0221	Stone Mason (ornamental)	Day	0.30	₹ 425.00	₹ 127.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	c. Expoxy resin etc. (LS)	0.30	on	₹ 233.42	₹ 70.03
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 303.45	₹ 4.55
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 308.00	₹ 9.24
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 317.24	₹ 47.59
				Total	₹ 364.83
		Total cost for 1 Mtr.			₹ 243.22
				Say,	₹ 243.20

7.5 Mirror polishing on marble work/granite work /stone work wherever, required to give high gloss finish complete at all levels as required as per direction of the Engineer-in-Charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	Sqm.			
	a. T&P and materials:				
0120	Hire charge of Floor grinder machine (Granite)	Day	1.00	₹ 380.00	₹ 380.00
	b. Labours:				
0203	Beldar	Day	2.50	₹ 300.00	₹ 750.00
0205	Bhishti	Day	1.50	₹ 300.00	₹ 450.00
	c. Grease, mop grinding stones etc.. (LS)	5%	on	₹ 1,580.00	₹ 79.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,659.00	₹ 24.89
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,683.89	₹ 50.52
	f. Contractor's profit & overheads: @ 15% on total.	0.15	on	₹ 1,734.41	₹ 260.16

				Total	₹ 1,994.57
		Total cost for 1 Sqm.			₹ 199.46
				Say,	₹ 199.50

- 7.6 Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for providing one opening of required size	Mtr.			
	a. Labours:				
0221	Stone Mason (ornamental)	Day	0.40	₹ 425.00	₹ 170.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	b. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 290.00	₹ 4.35
	c. Sundries & contingencies: @ 3% on total.	3.0%	on	₹ 294.35	₹ 8.83
	d. Contractor's profit & overheads: @ 15% on total.	15.0%	on	₹ 303.18	₹ 45.48
				Total	₹ 348.66
		Cost of each			₹ 348.66
				Say,	₹ 348.70

- 7.7 Providing and fixing cramps of required size and shape in RCC/CC/ Brick masonry backing with cement mortar 1:2 (1 cement : 2 fine sand) including drilling necessary holes in stones and embedding the cramp in the hole (fastener to be paid separately) complete at all levels as required:-

7.7.1 Gun metal cramps.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 cramps	No.			
	a. Materials:				
07004	Gun metal cramp $10 \times 0.064 \times 0.025 \times 0.006 = 9.6 \times 10^5$ $10 \times 0.025 \times 0.025 \times 0.006 = 3.7 \times 10^5 = 13.3 \times 10^5$ less hole $10 \times 0.024 \times 0.010 \times 0.006 = 1.4 \times 10^5 = 11.9 \times 10^5$ $\times 8640 = 1.03$ kg Add wastage @ 5% = 0.051kg. Total = 1.08 kg. Gun metal cramp	Kg.	1.08	₹ 350.00	₹ 378.00
	Cement mortar 1:2 (1 cement:2 fine sand) (Rate as per item No. 3.1.2)	Cum.	0.001	₹ 5,011.28	₹ 5.01
	b. Carriage:				
	Gun metal cramp (LS)	Kg.	1.08	₹ 0.11	₹ 0.12
	c. Labours:				
	For fixing in position	20%	on	₹ 383.13	₹ 76.63
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 459.76	₹ 6.90
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 466.66	₹ 14.00
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 480.66	₹ 72.10
				Total	₹ 552.76
		Total cost for 1 kg		Total	₹ 536.66
				Say,	₹ 536.70

7.7.2 Stainless steel cramps.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 cramps	No.			
	a. Materials:				
07007	Stainless steel cramp $10 \times 0.064 \times 0.025 \times 0.006 = 9.6 \times 10^5$ $10 \times 0.025 \times 0.025 \times 0.006 = 3.7 \times 10^5 = 13.3 \times 10^5$ less hole $10 \times 0.024 \times 0.010 \times 0.006 = 1.4 \times 10^5 = 11.9 \times 10^5$ $\times 7850 = 0.934$ kg Add wastage @ 5% = 0.047kg. Total = 0.981 kg Stainless steel cramp	Kg.	0.981	₹ 330.00	₹ 323.73

	Cement mortar 1:2 (1 cement:2 fine sand) (Rate as per item No. 3.1.2)	Cum.	0.001	₹ 5,011.28	₹ 5.01
	b. Carriage:				
	Stainless steel cramp	Kg.	0.98	₹ 0.11	₹ 0.11
	c. Labours:				
	For fixing in position (LS)	20%	on	₹ 328.85	₹ 65.77
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 394.62	₹ 5.92
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 400.54	₹ 12.02
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 412.56	₹ 61.88
				Total	₹ 474.44
		Total cost for 1 kg		Total	₹ 507.97
				Say,	₹ 508.00

7.8 Providing and fixing expansion hold fasteners on C.C./R.C.C./Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete at all levels as required:-

7.8.1 Wedge expansion type:-

7.8.1.1 Fastener with threaded dia 6 mm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30nos. W.E.H. fastener	No.			
	a. Materials and T&P:				
07011	Wedge expansion hold fastener size 6mm, 36.5mm length	Each	30	₹ 14.00	₹ 420.00
05017	Bolt 6mm dia. Length (36.5+10mm)	Qtl	0.00	₹ 5,200.00	₹ 23.40
	Hire and running charges for hand drill machine	LS	22.00	₹ 1.00	₹ 22.00
	Drilling bit, scaffolding etc.	LS	2.5	₹ 1.00	₹ 2.50
	b. Carriage:				
	Wedge expansion hold fastener size 6mm, 36.5mm length & Bolt 6mm dia. Length (36.5+10mm) (LS)	LS	0.50	₹ 1.00	₹ 0.50
	c. Labours:				
0215	Fitter Grade-I	Day	0.25	₹ 380.00	₹ 95.00
0203	Beldar	LS	0.25	₹ 300.00	₹ 75.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 638.40	₹ 9.58
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 647.98	₹ 19.44
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 667.42	₹ 100.11
				Total	₹ 767.53
		Total cost for 1 no.			₹ 25.58
				Say,	₹ 25.60

7.8.1.2 Fastener with threaded dia 10 mm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30nos. W.E.H. fastener	No.			
	a. Materials and T&P:				
07012	Wedge expansion hold fastener size 10mm, 44.5mm length	Each	30	₹ 16.00	₹ 480.00
05017	Bolt 10mm dia. Length (44.5+10mm)	Qtl	0.006	₹ 5,200.00	₹ 31.20
	Hire and running charges for hand drill machine	LS	24.00	₹ 1.00	₹ 24.00
	Drilling bit, scaffolding etc.	LS	3.0	₹ 1.00	₹ 3.00
	b. Carriage:				
	Wedge expansion hold fastener size 10mm, 44.5mm length Bolt 10mm dia. Length (44.5+10mm) (LS)	LS	0.75	₹ 1.00	₹ 0.75
	c. Labours:				
0215	Fitter Grade-I	Day	0.25	₹ 380.00	₹ 95.00
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 708.95	₹ 10.63
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 719.58	₹ 21.59

	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 741.17	₹ 111.18
				Total	₹ 852.35
		Total cost for 1 no.			₹ 28.41
				Say,	₹ 28.40

7.8.1.3 Fastener with threaded dia 12 mm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30nos. W.E.H. fastener	No.			
	a. Materials and T&P:				
07010	Wedge expansion hold fastener size 12mm, 58.7mm length	Each	30	₹ 31.00	₹ 930.00
05017	Bolt 12mm dia. Length (58.7+10mm) @ 0.05 kg./each	Qtl	0.0075	₹ 5,200.00	₹ 39.00
	Hire and running charges for hand drill machine	LS	25.50	₹ 1.00	₹ 25.50
	Drilling bit, scaffolding etc.	LS	3.5	₹ 1.00	₹ 3.50
	b. Carriage:				
	Wedge expansion hold fastener size 12mm, 58.7mm length & Bolt 12mm dia. Length (58.7+10mm) (LS)	LS	1.00	₹ 1.00	₹ 1.00
	c. Labours:				
0215	Fitter Grade-I	Day	0.25	₹ 380.00	₹ 95.00
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,169.00	₹ 17.54
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,186.54	₹ 35.60
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,222.14	₹ 183.32
				Total	₹ 1,405.46
		Total cost for 1 no.			₹ 46.85
				Say,	₹ 46.90

7.9 Stone tile (polished) work for wall lining over 12mm thick bed of cement mortar 1:3 (1 cement : 3 fine sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete including rubbing, curing etc. complete at all levels as required:-

7.9.1 8 mm thick

7.9.1.1 Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble or equivalent duly approved.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 8mm thick marble tiles 1 Sqm.	Sqm.			
	Qty. = 1.00 sqm. + Add wastage @ 2.5% = 0.025 Sqm, Total = 1.025 Sqm.				
	a. Materials:				
10002	8 mm thick marble tiles (mirror polished of all shades)	Sqm.	1.025	₹ 435.00	₹ 445.88
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.014	₹ 3,992.09	₹ 55.89
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.0033	₹ 16,378.86	₹ 54.71
03001	Cement for slurry	Tonne	0.0033	₹ 6,100.00	₹ 20.13
	b. Carriage:				
0454	8 mm thick marble tiles (mirror polished of all shades)	Tonne	0.023	₹ 110.94	₹ 2.55
0421	Cement for slurry	Tonne	0.0033	₹ 110.94	₹ 0.37
	c. Labours:				
0221	Mason 1st class	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,304.53	₹ 19.57
	e. Sundries (admixture of pigment, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 1,324.10	₹ 39.72
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,363.82	₹ 204.57
		Total cost for 1 Sqm.		Total	₹ 1,568.39

			Say,	₹ 1,568.40

7.9.1.2 Granite of any colour and shade duly approved .

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 8mm thick Granite tiles 1 Sqm.	Sqm.			
	Qty. = 1.00 sqm. + Add wastage .@ 2.5% = 0.025sqm, Total = 1.025 sqm.				
	a. Materials:				
07001	8 mm thick granite stone tiles (mirror polished of all shades)	Sqm.	1.025	₹ 825.00	₹ 845.63
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.01	₹ 3,992.09	₹ 55.89
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.00	₹ 16,378.86	₹ 54.71
03001	Cement for slurry	Tonne	0.00	₹ 6,100.00	₹ 20.13
	b. Carriage:				
0454	8 mm thick granite stone tiles (mirror polished of all shades)	Tonne	0.02	₹ 110.94	₹ 2.55
0421	Cement for slurry	Tonne	0.00	₹ 110.94	₹ 0.37
	c. Labours:				
0221	Mason 1st class	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,704.28	₹ 25.56
	e. Sundries (admixture of pigment, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 1,729.84	₹ 51.90
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,781.74	₹ 267.26
		Total cost for 1 Sqm.		Total	₹ 2,049.00
				Say,	₹ 2,049.00

7.10 Providing and fixing stone slab with table rubbed, edges rounded and polished of size 75x50 cm deep and approved thickness fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 fine sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth including rubbing, curing etc. complete at all levels as required (measurement should be of exposed finished work):-

7.10.1 White Agaria Marble Stone of approved shade of 18 mm thick (75 x 50 cm).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one No or 0.375 sqm.	Sqm.			
	Agaria Marble Stone 1 x 0.75 x 0.50 = 0.375 + add wastage @ 20% = 0.075 sqm. Total = 0.45sqm.				
	a. Materials:				
07008	Agaria Marble Stone	Sqm.	0.45	₹ 1,950.00	₹ 877.50
	Cement concrete 1:2:4 for filling (LS)	LS	25.00	₹ 1.25	₹ 31.25
	b. Carriage:				
0454	Agaria Marble Stone	Tonne	0.02	₹ 110.94	₹ 2.55
	c. Labours:				
	Labour for fixing, edge rounding and final polishing	5%	on	₹ 911.30	₹ 45.57
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 956.87	₹ 14.35
	e. Sundries (admixture of pigment etc.) & contingencies: @ 3% on total.	3%	on	₹ 971.22	₹ 29.14
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,000.36	₹ 150.05
				Total	₹ 1,150.41

		Total cost for 1 Sqm.		₹ 3,067.76
			Say,	₹ 3,067.80

7.10.2 White Agaria Marble Stone of approved shade of 14 mm thick (75 x 50 cm).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one No or 0.375 sqm.	Sqm.			
	Agaria Marble Stone 1 x 0.75 x 0.50 = 0.375 + add wastage @ 20% = 0.075 sqm. Total = 0.45sqm.				
	a. Materials:				
07017	Agaria Marble Stone	Sqm.	0.45	₹ 1,550.00	₹ 697.50
	Cement concrete 1:2:4 for filling (LS)	LS	25.00	₹ 1.25	₹ 31.25
	b. Carriage:				
0454	Agaria Marble Stone	Tonne	0.023	₹ 110.94	₹ 2.55
	c. Labours:				
	Labour for fixing, edge rounding and final polishing	5%	on	₹ 731.30	₹ 36.57
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 767.87	₹ 11.52
	e. Sundries (admixture of pigment etc.) & contingencies: @ 3% on total.	3%	on	₹ 779.39	₹ 23.38
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 802.77	₹ 120.42
				Total	₹ 923.19
		Total cost for 1 Sqm.			₹ 2,461.84
				Say,	₹ 2,461.80

7.10.3 Granite of any colour and shade duly approved of 18 mm thick (75 x 50 cm).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one No or 0.375 sqm.	Sqm.			
	Granite Stone 1 x 0.75 x 0.50 = 0.375 + add wastage @ 20% = 0.075 sqm. Total = 0.45sqm.				
	a. Materials:				
07009	Granite Stone	Sqm.	0.45	₹ 1,950.00	₹ 877.50
	Cement concrete 1:2:4 for filling	LS	25.00	₹ 1.25	₹ 31.25
	b. Carriage:				
2201	Granite Stone	Tonne	0.023	₹ 110.94	₹ 2.55
	c. Labours:				
	Labour for fixing, edge rounding and final polishing.	5%	on	₹ 911.30	₹ 45.57
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 956.87	₹ 14.35
	e. Sundries (admixture of pigment, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 971.22	₹ 29.14
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,000.36	₹ 150.05
				Total	₹ 1,150.41
		Total cost for 1 Sqm.			₹ 3,067.76
				Say,	₹ 3,067.80

7.10.4 Granite of any colour and shade duly approved of 14 mm thick (75 x 50 cm).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one No or 0.375 sqm.	Sqm.			
	Granite Stone 1 x 0.75 x 0.50 = 0.375 + add wastage @ 20% = 0.075 sqm. Total = 0.45sqm.				
	a. Materials:				
07018	Granite Stone	Sqm.	0.45	₹ 1,550.00	₹ 697.50
	Cement concrete 1:2:4 for filling	LS	25.00	₹ 1.25	₹ 31.25
	b. Carriage:				
2201	Granite Stone	Tonne	0.023	₹ 110.94	₹ 2.55
	c. Labours:				
	Labour for fixing, edge rounding and final polishing.	5%	on	₹ 731.30	₹ 36.57
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 767.87	₹ 11.52

	e. Sundries (admixture of pigment, scaffolding etc.) & contingencies: @ 3% on total.	3%	on	₹ 779.39	₹ 23.38
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 802.77	₹ 120.42
				Total	₹ 923.19
		Total cost for 1 Sqm.			₹ 2,461.84
				Say,	₹ 2,461.80

- 7.11 Providing and fixing machine cut, mirror/ eggshell polished , Marble stone work for wall lining (veneer work) including dado, skirting, risers of steps etc., in required design and pattern wherever required, stones of different finished surface texture, on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 fine sand) laid and jointed with white cement slurry @ 3.3 kg/sqm including pointing with white cement slurry admixed with pigment of matching shade, including rubbing, curing, polishing etc. all complete as per Architectural drawings, and as directed by the Engineer-in-Charge.**

7.11.1 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.50 sqm.	Sqm.			
	Marble Stone = 0.50 + add wastage @ 20% = 0.1 sqm. Total = 0.60sqm.				
	a. Materials:				
07019	18 mm thick Italian Marble stone slab, Perlato (slab area up to 0.5 sqm)	Sqm.	0.60	₹ 3,450.00	₹ 2,070.00
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.033	₹ 3,992.09	₹ 131.74
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.033	₹ 16,378.86	₹ 540.50
	b. Carriage:				
2201	Marble Stone	Tonne	0.03	₹ 110.94	₹ 3.33
	c. Labours:				
0221	Mason (for ornamental	day	0.335	₹ 425.00	₹ 142.38
0203	Beldar	day	0.335	₹ 300.00	₹ 100.50
0212	Coolie	day	0.335	₹ 300.00	₹ 100.50
0205	Bhisti	day	0.335	₹ 300.00	₹ 100.50
0224	Mate	day	0.165	₹ 300.00	₹ 49.50
0206	Blaksmith 1st class	day	0.135	₹ 425.00	₹ 57.38
	e. Water charges charges: @ 1.00% on total.	1.0%	on	₹ 3,296.33	₹ 32.96
	f. Sundries including scaffolding & contingencies: @ 3% on total.	3%	on	₹ 3,329.29	₹ 99.88
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 3,429.17	₹ 514.38
				Total	₹ 3,943.55
		Total cost for 1 Sqm.			₹ 7,887.10
				Say,	₹ 7,887.10

- 7.12 Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.**

7.12.1 Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	18mm thick - Flamed finish granite slab 10.00 sqm Add for wastage 15% =1.50 sqm, Total 11.50 sqm				
	a. Materials:				
07020	18 mm thick Flamed finish granite stone slab	Sqm.	11.50	₹ 1,950.00	₹ 22,425.00
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.224	₹ 3,184.67	₹ 713.37
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.033	₹ 16,378.86	₹ 540.50
	b. Carriage:				
2201	Stone	Tonne	0.67	₹ 110.94	₹ 74.33

	c. Labours:				
0221	Mason (for ornamental	day	1.200	₹ 425.00	₹ 510.00
0203	Beldar	day	1.000	₹ 300.00	₹ 300.00
0212	Coolie	day	1.000	₹ 300.00	₹ 300.00
0234	Skilled Belder (for floor rubbing etc.)	day	5.000	₹ 380.00	₹ 1,900.00
	d. Black colour dark shade Pigment: @ 1% on total.	1.0%	on	₹ 26,763.20	₹ 267.63
	e. Water charges charges: @ 1.00% on total.	1.0%	on	₹ 27,030.83	₹ 270.31
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 27,301.14	₹ 819.03
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 28,120.17	₹ 4,218.03
				Total	₹ 32,338.20
		Total cost for 1 Sqm.			₹ 3,233.82
				Say,	₹ 3,233.80

7.13 Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 fine sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.

7.13.1 Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	18mm thick - granite slab 10.00 sqm Add for wastage 15% =1.50 sqm, Total 11.50 sqm				
	a. Materials:				
07002	Granite of any colour, 18 mm thick (slab area above 0.50 sqm)	Sqm.	11.50	₹ 2,050.00	₹ 23,575.00
	Cement mortar 1:4 (Rate as per item No. 3.1.4)	Cum	0.224	₹ 3,184.67	₹ 713.37
	White cement mortar 1:2 (Rate as per item No. 3.4.1)	Cum	0.033	₹ 16,378.86	₹ 540.50
	b. Carriage:				
2201	Stone	Tonne	0.67	₹ 110.94	₹ 74.33
	c. Labours:				
0221	Mason (for ornamental	day	1.200	₹ 425.00	₹ 510.00
0203	Beldar	day	1.000	₹ 300.00	₹ 300.00
0212	Coolie	day	1.000	₹ 300.00	₹ 300.00
0234	Skilled Belder (for floor rubbing etc.)	day	2.000	₹ 380.00	₹ 760.00
0105	Hand Grinder for mirror polish	day	2.000	₹ 285.00	₹ 570.00
	d. Black colour dark shade Pigment: @ 1% on total.	1.0%	on	₹ 27,343.20	₹ 273.43
	e. Water charges charges: @ 1.00% on total.	1.0%	on	₹ 27,616.63	₹ 276.17
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 27,892.80	₹ 836.78
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 28,729.58	₹ 4,309.44
				Total	₹ 33,039.02
		Total cost for 1 Sqm.			₹ 3,303.90
				Say,	₹ 3,303.90

S U B - H E A D - 8



W O O D & P V C W O R K

**SUB HEAD : 8.0 / WOOD WORK & PVC WORK
BASIC RATES**

Code No.	Description	Unit	Rate
0201	Bandhani	Day	₹ 300.00
0206	Blacksmith 1st class	Day	₹ 425.00
0207	Blacksmith 2nd class	Day	₹ 380.00
0209	Carpenter 1st class	Day	₹ 425.00
0210	Carpenter 2nd class	Day	₹ 380.00
0203	Beldar	Day	₹ 300.00
0217	Glazier	Day	₹ 380.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0225	Mistry	Day	₹ 380.00
0227	Painter	Day	₹ 340.00
0208	Carpenter (average)	Day	₹ 400.00
	CARRIAGE		
0473	Timber	cum	₹ 80.65
0468	Steel	tonne	₹ 110.94
	MATERIALS		
08001	Non - Asbestos multi purpose fibre cement board 8mm thick.	sqm	₹ 313.00
08002	Flat pressed 3 layer particle board (medium density) Grade I :12 mm thick	sqm	₹ 364.00
08003	Extra for veneered particle board with : Teak veneering on one side and commercial veneered on other side	sqm	₹ 292.00
08004	Extra for veneered particle board with : Commercial veneering on both sides	sqm	₹ 185.00
08005	Extra for veneered particle board with : Teak veneering on both sides	sqm	₹ 520.00
08006	Brass butt hinges (light/ordinary type) : 125x70x4 mm	10 Nos	₹ 870.00
08007	Brass butt hinges (light/ordinary type) : 100x70x4 mm	10 Nos	₹ 725.00
08008	Brass butt hinges (light/ordinary type) : 75x40x2.5 mm	10 Nos	₹ 455.00
08009	Brass butt hinges (light/ordinary type) : 50x40x2.5 mm	10 Nos	₹ 208.00
08010	Brass butt hinges (heavy type) : 125x85x5.5 mm(.70)kg	10 Nos	₹ 3,368.00
08011	Brass butt hinges (heavy type) : 100x85x5.5 mm(.56)kg	10 Nos	₹ 2,885.00
08012	Brass butt hinges (heavy type) :75x65x4.0 mm(.20)kg	10 Nos	₹ 1,045.00

Code No.	Description	Unit	Rate
08013	Brass parliamentary hinges 150x125x27x5 mm	10 Nos	₹ 3,010.00
08014	Brass parliamentary hinges 125x125x27x5 mm	10 Nos	₹ 2,685.00
08015	Brass parliamentary hinges 100x125x27x5 mm	10 Nos	₹ 2,475.00
08016	Brass parliamentary hinges 75x100x20x3.2 mm	10 Nos	₹ 1,845.00
08017	Brass tower bolt (barrel type) 250x10 mm	each	₹ 245.00
08018	Brass tower bolt (barrel type) 200x10 mm	each	₹ 195.00
08019	Brass tower bolt (barrel type) 150x10 mm	each	₹ 155.00
08020	Brass tower bolt (barrel type) 100x10 mm	each	₹ 102.00
08021	Brass handles 125 mm with plate 175x32 mm	each	₹ 155.00
08022	Brass handles 100 mm with plate 150x32 mm	each	₹ 143.00
08023	Brass handles 75 mm with plate 125x32 mm	each	₹ 115.00
08024	Brass door latch 300x16x5 mm (0.380 kg)	each	₹ 187.00
08025	Brass door latch 250x16x5 mm (0.350 kg)	each	₹ 178.00
08026	Brass mortice latch and lock 100x65 mm with 6 levers and a pair of lever handles	each	₹ 400.00
08027	Brass mortice latch 100x65mm with a pair of brass lever handles	each	₹ 345.00
08028	Brass casement window fastener	Each	₹ 63.00
08029	Brass casement stays (straight peg type) 300 mm weighing not less than 0.33 kg	each	₹ 148.00
08030	Brass casement stays (straight peg type) 250 mm weighing not less than 0.28 kg	Each	₹ 125.00
08031	Brass casement stays (straight peg type) 200 mm weighing not less than 0.24 kg	each	₹ 115.00
08032	Brass hasps and staples (safety type) 300 mm	10 Nos	₹ 808.00
08033	Brass hasps and staples (safety type) 115 mm	10 Nos	₹ 678.00
08034	Brass hasps and staples (safety type) 90 mm	10 Nos	₹ 575.00
08035	Brass Night latch	each	₹ 504.00
08036	Brass cupboard knob or ward robe knob 50 mm	each	₹ 40.00
08037	Brass screws 50 mm	100 Nos	₹ 230.00
08038	Brass screws 40 mm	100 Nos	₹ 175.00
08039	Brass screws 30 mm	100 Nos	₹ 145.00
08040	Brass screws 25 mm	100 Nos	₹ 105.00
08041	Brass screws 20 mm	100 Nos	₹ 102.00
08042	Chromium plated Brass handles 125 mm with plate 175 x32 mm	Each	₹ 208.00

Code No.	Description	Unit	Rate
08043	Chromium plated Brass handles 100 mm with plate 150 x 32 mm	Each	₹ 180.00
08044	Chromium plated Brass handles 75mm with plate 125x32 mm	Each	₹ 155.00
08045	Chromium plated Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	₹ 609.00
08046	Chromium plated brass casement window fastener	each	₹ 102.00
08047	Chromium plated Brass casement stays (straight peg type) 300 mm weighing not less than 0.33 kg	each	₹ 174.00
08048	Chromium plated Brass casement stays (straight peg type) 250 mm weighing not less than 0.28 kg	each	₹ 145.00
08049	Chromium plated Brass casement stays (straight peg type) 200 mm weighing not less than 0.24 kg	each	₹ 130.00
08050	Chromium plated Brass Night latch	each	₹ 558.00
08051	Chromium plated Brass Wardrobe Knob 50 mm	each	₹ 52.00
08052	Chromium plated Brass screws 50 mm	100 Nos	₹ 256.00
08053	Chromium plated Brass screws 40 mm	100 Nos	₹ 228.00
08054	Chromium plated Brass screws 30 mm	100 Nos	₹ 167.00
08055	Chromium plated Brass screws 25 mm	100 Nos	₹ 130.00
08056	Chromium plated Brass screws 20 mm	100 Nos	₹ 108.00
08057	Chromium plated Brass curtain rod 12 mm dia 1.25mm thick	metre	₹ 210.00
08058	Chromium plated Brass curtain rod 20 mm dia 1.25mm thick	metre	₹ 270.00
08059	Chromium plated Brass curtain rod 25 mm dia 1.25mm thick	metre	₹ 380.00
08060	Bright finished or black enameled mild steel butt hinges 125x65x2.12 mm	10 Nos	₹ 155.00
08061	Bright finished or black enameled mild steel butt hinges 100x58x1.90 mm	10 Nos	₹ 100.00
08062	Bright finished or black enameled mild steel butt hinges 75x47x1.70 mm	10 Nos	₹ 75.00
08063	Bright finished or black enameled mild steel butt hinges 50x37x1.50 mm	10 Nos	₹ 75.00
08064	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	₹ 50.00
08065	Bright finished or black enameled mild steel screws 50 mm	100 Nos	₹ 75.00
08066	Bright finished or black enameled mild steel screws 40 mm	100 Nos	₹ 60.00
08067	Bright finished or black enameled mild steel screws 30 mm	100 Nos	₹ 50.00

Code No.	Description	Unit	Rate
08068	Bright finished or black enameled mild steel screws 25 mm	100 Nos	₹ 45.00
08069	Bright finished or black enameled mild steel screws 20 mm	100 Nos	₹ 35.00
08070	Bright finished or black enameled mild steel bolts and nuts 50x6 mm	each	₹ 10.00
08071	Oxidised mild steel butt hinges 125x65x2.12 mm	10 Nos	₹ 162.00
08072	Oxidised mild steel butt hinges 100x58x1.90 mm	10 Nos	₹ 100.00
08073	Oxidised mild steel butt hinges 75x47x1.70 mm	10 Nos	₹ 75.00
08074	Oxidised mild steel butt hinges 50x37x1.50 mm	10 Nos	₹ 68.00
08075	Oxidised mild steel parliamentary hinges 150x125x27x2.8 mm	10 Nos	₹ 365.00
08076	Oxidised mild steel parliamentary hinges 125x125x27x2.8 mm	10 Nos	₹ 335.00
08077	Oxidised mild steel parliamentary hinges 100x125x27x2.8 mm	10 Nos	₹ 250.00
08078	Oxidised mild steel parliamentary hinges 75x100x20x2.24 mm	10 Nos	₹ 230.00
08079	Oxidised mild steel single acting spring hinges 150 mm	each	₹ 128.00
08080	Oxidised mild steel single acting spring hinges 125 mm	each	₹ 118.00
08081	Oxidised mild steel single acting spring hinges 100 mm	each	₹ 98.00
08082	Oxidised mild steel double acting spring hinges 150 mm	each	₹ 125.00
08083	Oxidised mild steel double acting spring hinges 125 mm	each	₹ 130.00
08084	Oxidised mild steel double acting spring hinges 100 mm	each	₹ 105.00
08085	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	₹ 62.00
08086	Oxidised mild steel sliding door bolt 300x16 mm	each	₹ 105.00
08087	Oxidised mild steel sliding door bolt 250x16 mm	each	₹ 105.00
08088	Oxidised mild steel door latch 300x20x6 mm	each	₹ 60.00
08089	Oxidised mild steel door latch 250x20x6 mm	each	₹ 48.00
08090	Oxidised mild steel tower bolt (barrel type) 250x10 mm	each	₹ 52.00
08091	Oxidised mild steel tower bolt (barrel type) 200x10 mm	each	₹ 45.00
08092	Oxidised mild steel tower bolt (barrel type) 150x10 mm	each	₹ 40.00
08093	Oxidised mild steel tower bolt (barrel type) 100x10 mm	each	₹ 34.00

Code No.	Description	Unit	Rate
08094	Oxidised mild steel handles 125 mm	each	₹ 20.00
08095	Oxidised mild steel handles 100 mm	each	₹ 15.00
08096	Oxidised mild steel handles 75 mm	each	₹ 12.00
08097	Oxidised mild steel hasps and staples(safety type) 150 mm	10 Nos	₹ 140.00
08098	Oxidised mild steel hasps and staples(safety type) 115 mm	10 Nos	₹ 120.00
08099	Oxidised mild steel hasps and staples(safety type) 90 mm	10 Nos	₹ 90.00
08100	Oxidised mild steel screws 50 mm	100 Nos	₹ 88.00
08101	Oxidised mild steel screws 40 mm	100 Nos	₹ 75.00
08102	Oxidised mild steel screws 30 mm	100 Nos	₹ 56.00
08103	Oxidised mild steel screws 25 mm	100 Nos	₹ 56.00
08104	Oxidised mild steel screws 20 mm	100 Nos	₹ 45.00
08105	Anodised Aluminium butt hinges 125x75x4 mm	10 Nos	₹ 645.00
08106	Anodised Aluminium butt hinges 125x63x4 mm	10 Nos	₹ 580.00
08107	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos	₹ 630.00
08108	Anodised Aluminium butt hinges 100x63x3.2 mm	10 Nos	₹ 510.00
08109	Anodised Aluminium butt hinges 100x63x4 mm	10 Nos	₹ 530.00
08110	Anodised Aluminium butt hinges 75x63x4 mm	10 Nos	₹ 450.00
08111	Anodised Aluminium butt hinges 75x63x3.2 mm	10 Nos	₹ 300.00
08112	Anodised Aluminium butt hinges 75x45x3.2 mm	10 Nos	₹ 230.00
08113	Anodised Aluminium sliding door bolt 300x16 mm	each	₹ 180.00
08114	Anodised Aluminium sliding door bolt 250x16 mm	each	₹ 145.00
08115	Anodised Aluminium tower bolt (barrel type) 300x10 mm	10 Nos	₹ 730.00
08116	Anodised Aluminium tower bolt (barrel type) 250x10 mm	10 Nos	₹ 530.00
08117	Anodised Aluminium tower bolt (barrel type) 200x10 mm	10 Nos	₹ 470.00
08118	Anodised Aluminium tower bolt (barrel type) 150x10 mm	10 Nos	₹ 420.00
08119	Anodised Aluminium tower bolt (barrel type) 100x10 mm	10 Nos	₹ 310.00
08120	Anodised Aluminium handles 125 mm with plate 175 x 32 mm	10 Nos	₹ 400.00
08121	Anodised Aluminium handles 100 mm with plate 150 x 32 mm	10 Nos	₹ 280.00
08122	Anodised Aluminium handles 75 mm with plate 125 x 32 mm	10 Nos	₹ 230.00

Code No.	Description	Unit	Rate
08123	Anodised Aluminium kicking plate 50 cm long 100x3.15 mm	each	₹ 140.00
08124	Block board construction flush door with teak wood ply on both faces 35 mm thick	sqm	₹ 1,700.00
08125	Block board construction flush door with teak wood ply on both faces 30 mm thick	sqm	₹ 1,600.00
08126	Block board construction flush door with teak wood ply on both faces 25 mm thick	sqm	₹ 1,500.00
08127	Block board construction flush door with commercial ply on both faces 35 mm thick	sqm	₹ 1,050.00
08128	Block board construction flush door with commercial ply on both faces 30 mm thick	sqm	₹ 950.00
08129	Block board construction flush door with commercial ply on both faces 25 mm thick	sqm	₹ 880.00
08130	Block board construction flush door lipping	sqm of door area	₹ 324.00
08131	Square vision panel in Block board construction flush door	sqm of door area	₹ 135.00
08132	Circular vision panel in Block board construction flush door	Sqm of door area	₹ 210.00
08133	Decorative type Louvers in Block board construction flush door	sqm of door area	₹ 335.00
08134	Rebate cutting in Block board construction flush door	sqm of door area	₹ 98.00
08135	Decorative plywood 4 mm	sqm	₹ 400.00
08136	Glue	kilogram	₹ 135.00
08137	Synthetic enamel paint in all shades except black or chocolate shade	litre	₹ 180.00
12031	Plaster of Paris	kilogram	₹ 6.50
08139	Mild steel round bar above 12 mm dia	quintal	₹ 4,010.00
05026	Flats up to 10 mm in thickness	quintal	₹ 3,992.00
05034	Mild steel expanded metal 20x60 mm strands	sqm	₹ 314.00
05032	Hard drawn steel wire fabric	sqm	₹ 535.00
08143	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	₹ 15.00
08144	Sal wood scantling / plank	10 cudm	₹ 480.00
08145	G.I. plain washer for seam bolts	100 Nos	₹ 40.00
08146	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	₹ 360.00
08147	Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm).	sqm	₹ 535.00

Code No.	Description	Unit	Rate
08148	Ply wood 5 ply with commercial ply on both faces 6 mm thick	sqm	₹ 455.00
08149	Oxidised mild steel pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	₹ 60.00
08150	Brass cupboard lock 6 levers (best make of approved quality) 40 mm size	each	₹ 75.00
08151	Brass cupboard lock 6 levers (best make of approved quality) 50 mm size	each	₹ 85.00
08152	Brass cupboard lock 6 levers (best make of approved quality) 65 mm size	each	₹ 90.00
08153	Brass cupboard lock 6 levers (best make of approved quality) 75 mm size	each	₹ 110.00
08154	Brass hanging type door stopper 150 mm	each	₹ 78.00
08155	Hydraulic door closer bottle type M.S. body with necessary accessories and screws complete	each	₹ 625.00
08156	Anodised Aluminium hanging type door stopper	each	₹ 25.00
08157	Anodised Aluminium pull bolt lock (locking bolt) of size 85 mmx42 mm with screws, bolts ,nuts and washers complete	each	₹ 60.00
08158	Anodised Aluminium Casement stay 250 mm	each	₹ 35.00
08159	Nickeled Chromium Brass cupboard lock 40 mm size	each	₹ 75.00
08160	Nickeled Chromium Brass cupboard lock 50 mm size	each	₹ 85.00
08161	Nickeled Chromium Brass cupboard lock 65 mm size	each	₹ 98.00
08162	Nickeled Chromium Brass cupboard lock 75 mm size	each	₹ 125.00
08163	Ply wood 5 ply with teak ply on both faces 9 mm thick	sqm	₹ 920.00
08164	Ply wood 5 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	₹ 722.00
08165	Ply wood 7 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	₹ 825.00
08166	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	₹ 295.00
08167	Pair of Anodised Aluminium lever handles for 100mm mortice latch and lock	each	₹ 350.00
08168	Joint tape roll	roll	₹ 145.00
08169	Dash fastener/ Chemical fastener	each	₹ 30.00
08170	All drive screws (for gypsum board)	100 Nos	
08171	Primer (for gypsum board)	litre	₹ 95.00
08172	Chromium plated brackets (curtain rods)	each	₹ 10.00

Code No.	Description	Unit	Rate
08173	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia. of wire 0.63 mm	sqm	₹ 275.00
08174	Frosted glass sheet of nominal thickness 4 mm (weighing not less than 10 kg/sqm)	sqm	₹ 400.00
08175	Nickel plated M.S. pipe 20 mm dia.	metre	₹ 100.00
08176	Nickel plated M.S. Brackets for curtain rod 20 mm	each	₹ 10.00
08177	Nickel plated M.S. Brackets for curtain rod 25 mm	each	₹ 10.00
08178	Oxidised mild steel screws 35 mm	100 Nos	₹ 55.00
08179	Mild steel conduit pipe (heavy type) ISI marked-20 mm dia.	metre	₹ 65.00
08180	Mild steel conduit pipe (heavy type) ISI marked-25 mm dia.	metre	₹ 75.00
08181	Teak wood lipping of size 25x3 mm in pelmets	metre	₹ 35.00
08182	Flat pressed 3 layer and graded particle board (medium density) Grade 1 conforming to IS : 3087 - 18 mm thick	sqm	₹ 455.00
08183	Aluminium tee channel (heavy duty) with rollers and stop end	metre	₹ 62.00
08184	Aluminium hanging floor door stopper with twin rubber & stopper	each	₹ 40.00
08185	Hydraulic door closer tubular type Aluminium section body	each	₹ 865.00
08186	Oxidised M.S.casement stay (straight peg type) 300 mm not less than 0.33 kg	each	₹ 34.00
08187	Oxidised M.S.casement stay (straight peg type) 250 mm not less than 0.28 kg	each	₹ 30.00
08188	Oxidised M.S.casement stay (straight peg type) 200 mm not less than 0.24 kg	each	₹ 25.00
08189	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick plain type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	₹ 1,850.00
08190	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick both sides prelaminated type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	₹ 2,050.00

Code No.	Description	Unit	Rate
08191	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick one side prelaminated type-I, and other side balancing lamination, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	₹ 2,000.00
08192	Factory made 30 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of sheet glass using 10 kg/sqm glass panes	sqm	₹ 1,700.00
08193	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm on both directions with wire of dia 0.63 mm	sqm	₹ 1,700.00
08194	Factory made 30 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm on both directions with wire of dia 0.63 mm	sqm	₹ 1,500.00
08195	Laminated veneer lumber confirming to TADSS IS:1995 manufactured in factory in frames of doors, windows	10 cudm	₹ 730.00
08196	Oxidised M.S. safety chain (weighing not less than 450 gms) for door	each	₹ 62.00
08197	25 mm thick particle board	sqm	₹ 490.00
08198	IInd class teak wood lipping 25 mm wide x 12 mm thick	metre	₹ 55.00
08199	25 mm thick melamine faced prelaminated three layer particle board	sqm	₹ 850.00
08200	For flush door shutters Extra for providing teak veneering on one side instead of commercial veneering	sqm	₹ 375.00
08201	Expandable fastener with plastic sleeve and M.S. screws. 25 mm long	each	₹ 12.00
08202	Expandable fastener with plastic sleeve and M.S. screws. 32 mm long	each	₹ 14.00
08203	Expandable fastener with plastic sleeve and M.S. screws. 40 mm long	each	₹ 16.00
08204	Expandable fastener with plastic sleeve and M.S. screws. 50 mm long	each	₹ 20.00
08205	12 mm M.S. 'U' beading	metre	₹ 20.00
08206	Glass reinforced Gyp sum (GRG) board 8.5 mm thick	sqm	₹ 270.00
08207	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm	metre	₹ 85.00

Code No.	Description	Unit	Rate
08208	Galvanised M.S. sheet 0.50 mm thick pressed stud. 48x34x36 mm	metre	₹ 95.00
08209	Aluminium single cleat of size 30x32x3	each	₹ 20.00
08210	Aluminium grip strip of size 50x12x2	each	₹ 15.00
08211	25 mm prelaminated flush door both side decorative	sqm	₹ 880.00
08212	Aluminium U beading	kilogram	₹ 250.00
08213	Glass sheet (Pin headed) 4 mm thick	sqm	₹ 345.00
08214	Veneered particle board with commercial veneering on both sides 12 mm thick	sqm	₹ 525.00
08215	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	₹ 785.00
08216	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)18 mm thick	sqm	₹ 890.00
08217	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)25 mm thick	sqm	₹ 960.00
08218	Prelaminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	₹ 815.00
08219	Oxidised M. S. hinges finished with nickel plating 50 mm (Over all width)	metre	₹ 60.00
08220	Oxidised M. S. hinges finished with nickel plating 65 mm (Over all width)	metre	₹ 45.00
08221	PTMT handle 125x34x24mm	Each	₹ 28.00
08222	PTMT handle 150x34x24mm	Each	₹ 32.00
08223	PTMT butt hinges 75x60x10mm	Each	₹ 40.00
08224	PTMT butt hinges 100x75x10mm	Each	₹ 56.00
08225	PTMT Tower bolt 152x42x18mm	Each	₹ 65.00
08226	PTMT Tower bolt 202x42x18mm	Each	₹ 80.00
08227	PTMT door catcher 72x42mm	Each	₹ 27.00
08228	Coir veneered board 4mm thick	sqm	₹ 315.00
08229	Coir veneered board 6mm thick	sqm	₹ 420.00

Code No.	Description	Unit	Rate
08230	Coir veneered board 18mm thick	sqm	₹ 1,105.00
08231	24 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	₹ 1,400.00
08232	30 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	₹ 1,520.00
08233	Factory made PVC rigid foam paneled shutter i/c carriage	sqm	₹ 2,275.00
08234	Factory made PVC rigid foam paneled shutter as per IS : 4020 i/c carriage	sqm	₹ 2,685.00
08235	Factory made PVC rigid foam sheet 1mm thick	sqm	₹ 210.00
08236	48mmX40mmX1.5mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	₹ 185.00
08237	Factory made door frame PVC extruded sheet i/c carriage	metre	₹ 350.00
08238	Powder coated M.S. butt hinges 100mm X58mmX1.9mm	10 Nos	₹ 100.00
08239	Stainless steel screws 50 mm	100 Nos	₹ 275.00
08240	Stainless steel screws 40 mm	100 Nos	₹ 215.00
08241	Stainless steel screws 30 mm	100 Nos	₹ 150.00
08242	Stainless steel screws 20 mm	100 Nos	₹ 120.00
08243	Stainless steel butt hinges 125x64x1.9 mm IS : 12817 marked	10 Nos	₹ 360.00
08244	Stainless steel butt hinges 100x58x1.9 mm IS : 12817 marked	10 Nos	₹ 250.00
08245	Stainless steel butt hinges 75x47x1.8 mm IS : 12817 marked	10 Nos	₹ 200.00
08246	Stainless steel butt hinges 50x37x1.5 mm IS : 12817 marked	10 Nos	₹ 150.00
08247	Stainless steel butt hinges (heavy weight) 125x64x2.5 mm IS : 12817 marked	10 Nos	₹ 400.00
08248	Stainless steel butt hinges (heavy weight) 100x60x2.5 mm IS : 12817 marked	10 Nos	₹ 270.00
08249	Stainless steel butt hinges (heavy weight) 75x50x2.5 mm IS : 12817 marked	10 Nos	₹ 230.00
08250	M.S. heavy weight but hinges 125x90x4.0mm IS : 1341 marked.	10 Nos	₹ 360.00
08251	M.S. heavy weight butt hinges 100x75x3.5 mm IS: 1341 marked	10 Nos.	₹ 200.00
08252	M.S. heavy weight butt hinges 75x60x3.1 mm IS: 1341 marked	10 Nos	₹ 110.00
08253	M.S. heavy weight butt hinges 50x40x2.5 mm IS : 1341 marked	10 Nos	₹ 95.00
08254	1mm thick 35mm wide bright finished stainless steel piano hinges .	metre	₹ 55.00
08255	8 mm thick tapered edge calcium silicate board .	sqm	₹ 275.00

Code No.	Description	Unit	Rate
08256	10 mm thick calcium silicate board.	sqm	₹ 430.00
08257	Telescopic drawer channels 300mm long .	set	₹ 165.00
08258	Stainless steel roller for sliding arrangement in racks/ cupboards/cabinets shutter .	each	₹ 12.00
08259	50mmX42mmX2mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	₹ 175.00
08260	25mm thick factory made PVC flush door shutter i/c carriage.	sqm	₹ 1,700.00
08261	Factory made glass reinforced plastic door frame 90x45 mm i/c carriage.	metre	₹ 340.00
08262	30 mm thick factory made glass fiber reinforced plastic panel door shutter i/c carriage.	sqm	₹ 1,680.00
08263	Factory made solid PVC door frame 60 x 30mm i/c carriage.	metre	₹ 315.00
08264	28mm factory made solid PVC panel door shutter i/c carriage.	sqm	₹ 2,000.00
08265	Fiber glass reinforced plastic chajja.	sqm	₹ 3,500.00
08266	Magnetic catcher triple strip vertical type.	each	₹ 25.00
08267	Magnetic catcher double strip horizontal type.	each	₹ 20.00
08268	100 mm mortice lock with 6 levers for aluminium door.	each	₹ 365.00
08269	12.5 mm thick Glass fibre reinforced Gypsum board .	sqm	₹ 215.00
08270	Ceiling sections 0.55 mm thick having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm.	metre	₹ 60.00
08271	Perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm.	metre	₹ 35.00
08272	Nylon sleeves & wooden screws (40mm)	each	₹ 5.00
08273	Counter sunk ribbed head screw 25mm.	cent	₹ 85.00
08274	12mm thick marine plywood conforming to IS:710	sqm	₹ 730.00
08275	12mm thick fire retardant plywood conforming to IS: 5509.	sqm	₹ 840.00
08276	1.5mm thick decorative laminated sheet	sqm	₹ 550.00
08277	1.0mm thick decorative laminated sheet	sqm	₹ 360.00
08278	30 mm thick factory made glass fiber reinforced plastic flush door shutter i/c carriage.	sqm	₹ 2,000.00
08279	Karai Wood scantlings	10 cudm	₹ 208.00
08280	Local Teak Wood- scantling	10 cudm	₹ 257.00

Code No.	Description	Unit	Rate
08281	Other Wood(Jam, Garjan, Chamal)	10 cudm	₹ 194.00
08282	Soft Wood	10 cudm	₹ 163.00
08283	Gamair Wood	10 cudm	₹ 350.00
08284	Ply wood 7 ply with teak ply on both faces 9 mm thick	Sqm	₹ 700.00
08285	Extra for selected planks of Gamair wood	10 cudm	₹ 50.00
08286	Gamair wood lipping/ moulded beading or Taj beading of size 18 X 5 mm	metre	₹ 15.00
08287	35 mm thick HDF, BWP type Shutter as per IS : 15380 - 2003 & IS : 848	Sqm	₹ 1,720.00
08288	Sal wood - beam	10 cudm	₹ 450.00
08289	Karai wood- beams	10 cudm	₹ 380.00
08290	Local Teak Wood - Planks	10 cudm	₹ 350.00
05050	Rawl plug 50 mm (designation 10 no.)	each	₹ 7.00
08302	Pre-laminated with decorative lamination on both side exterior Grade-I MDF Board 12 mm thick confirming to IS:14587	Sqm	₹ 460.00
08303	Pre-laminated with decorative lamination on both side exterior Grade-I MDF Board 18 mm thick confirming to IS:14587	Sqm	₹ 597.00
08304	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 25 mm thick confirming to IS: 14587	Sqm	₹ 900.00
08305	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 12 mm thick confirming to IS:14587		₹ 450.00
08306	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 18 mm thick confirming to IS:14587		₹ 580.00
08307	PVC edge bending tape 2.00 mm thick	metre	₹ 30.00
08308	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	metre	₹ 40.00
08309	Bright finished or black enameled mild steel screws 25 mm	100	₹ 37.00
08310	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	metre	₹ 40.00
08291	Bamboo wood shutter for doors	cum	₹ 1,80,000.00
08292	Bamboo wood Panelling	cum	₹ 1,80,000.00
08293	15 mm thick, light weight,fully perforated square/butt edge integral densified,false ceiling tiles of size 595x595 mm.	sqm	₹ 980.00
08294	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm	metre	₹ 69.00

Code No.	Description	Unit	Rate
08295	Galvanised M.S. sheet 0.50 mm thick pressed stud : 48x34x36 mm	metre	₹ 87.00
08296	Self tapping pan head nickle coated mild steel screws of size 13 x 3.2 mm	1000 Nos.	₹ 645.00
08297	12 mm dia 50 mm long wedge type expanded zinc alloy dash fastner	each	₹ 10.00
08298	Glass wool 50 mm thick	sqm	₹ 280.00
08299	Calcium silicate base compound for jointing calcium silicate tiles	kilogram	₹ 30.00
08300	Fibre joint tape 50 mm wide (90 metre) roll	each roll	₹ 200.00
08301	Calcium silicate base compound for jointing calcium silicate tiles	kilogram	₹ 32.00

SUB HEAD : 8.0					
WOOD WORK & PVC WORK					
8.10	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position :				
8.1.1	Sal Wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for Chowkhat of a door				
	206.75 × 117.5 cm				
	Materials				
	Sal Wood				
	2×206.75×9.5×7.0 cm = 0.028 cum.+				
	1×117.5×9.5×7.0 cm = 0.008 cum.				
	=				
	0.036 cum.+				
	Add for wastage @ 5% = 0.002 cum.				
	Grand Total = 0.038 cum.				
08288	Sal wood	10 cudm	38.00	₹ 450.00	₹ 1,710.00
0473	Carriage of material (timber)	cum	0.038	₹ 80.65	₹ 3.06
	Labour:				
0208	Carpenter (avg.)	Day	0.72	₹ 400.00	₹ 288.00
0203	Beldar	Day	0.07	₹ 300.00	₹ 21.00
	TOTAL				₹ 2,022.06
	Add 1 % for water charges				₹ 20.22
	TOTAL				₹ 2,042.28
	Add 3% for sundries & contingencies				₹ 61.27
	Total				₹ 2,103.55
	Add 15% for contractor's profit and overheads				₹ 315.53
	Cost of 36 cudm.				₹ 2,419.08
	Cost per cum.				₹ 67,196.67
	Say				₹ 67,196.70
8.10	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position :				
8.1.2	Karai wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for Chowkhat of a door				
	206.75 × 117.5 cm				
	Materials				
	Karai wood				
	2x206.75x9.5x7.0cm = 0.028 cum.+				
	1x117.5x9.5x7.0cm = 0.008 cum.				
	= 0.036 cum.+				
	Add for wastage @ 5% = 0.002 cum.				

	Grand Total = 0.038 cum.				
08289	Karai wood	10 cum	38.00	₹ 380.00	₹ 1,444.00
0473	Carriage of material (timber)	cum	0.038	₹ 80.65	₹ 3.06
	Labour:				
0208	Carpenter (avg.)	Day	0.72	₹ 400.00	₹ 288.00
0203	Beldar	Day	0.07	₹ 300.00	₹ 21.00
	TOTAL				₹ 1,756.06
	Add 1 % for water charges				₹ 17.56
	TOTAL				₹ 1,773.62
	Add 3% for sundries & contingencies				₹ 53.21
	Total				₹ 1,826.83
	Add 15% for contractor's profit and overheads				₹ 274.02
	Cost of 36 cum.				₹ 2,100.85
	Cost per cum.				₹ 58,356.94
	Say				₹ 58,356.90
8.10	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position :				
8.1.3	Local Teak Wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for Chowkhat of a door				
	206.75 × 117.5 cm				
	Materials				
	Local Teak Wood				
	2x206.75x9.5x7.0cm = 0.028 cum.+				
	1x117.5x9.5x7.0cm = 0.008 cum.				
	= 0.036 cum.+				
	Add for wastage @ 5% = 0.002 cum.				
	Grand Total = 0.038 cum.				
08290	Local Teak Wood wood	10 cum	38.00	₹ 350.00	₹ 1,330.00
0473	Carriage of timber	cum	0.038	₹ 80.65	₹ 3.06
	Labour:				
0208	Carpenter (average)	Day	0.72	₹ 400.00	₹ 288.00
0203	Beldar	Day	0.07	₹ 300.00	₹ 21.00
	TOTAL				₹ 1,642.06
	Add 1 % for water charges				₹ 16.42
	TOTAL				₹ 1,658.48
	Add 3% for sundries & contingencies				₹ 49.75
	Total				₹ 1,708.23
	Add 15% for contractor's profit and overheads				₹ 256.23
	Cost of 36 cum. (finished work)				₹ 1,964.46
	Cost per cum.				₹ 54,568.33
	Say				₹ 54,568.30
8.20	Extra for additional labour for circular works, such as in frames of fan light:				
8.2.1	Sal Wood				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for Chowkhat of a door				
	206.75 × 117.5 cm				
	Extra Materials and labour for wastage @ 10% on quantity of item no 8.1.1				
	Materials :				
08288	Sal wood	10 cudm	3.80	₹ 450.00	₹ 171.00
0473	Carriage of material (timber)	cum	0.0038	₹ 80.65	₹ 0.31
	Labour:				
0208	Carpenter (avg.)	Day	0.072	₹ 400.00	₹ 28.80
0203	Beldar	Day	0.007	₹ 300.00	₹ 2.10
	TOTAL				₹ 202.21
	Add 1% for water charges				₹ 2.02
	TOTAL				₹ 204.23
	Add 3% for sundries & contingencies				₹ 6.13
	Total				₹ 210.36
	Add 15% for contractor's profit and overheads				₹ 31.55
	Cost of 36 cudm.				₹ 241.91
	Cost per cum.				₹ 6,719.72
Say					₹ 6,719.70
8.20	Extra for additional labour for circular works, such as in frames of fan light:				
8.2.2	Karai wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for Chowkhat of a door				
	206.75 × 117.5 cm				
	Extra Materials and labour for wastage @ 10% on quantity of item no 8.1.2				
	Materials :				
08289	Karai Wood	10 cudm	3.80	₹ 380.00	₹ 144.40
0473	Carriage of material (timber)	cum	0.0038	₹ 80.65	₹ 0.31
	Labour:				
0208	Carpenter (avg.)	Day	0.072	₹ 400.00	₹ 28.80
0203	Beldar	Day	0.007	₹ 300.00	₹ 2.10
	TOTAL				₹ 175.61
	Add 1% for water charges				₹ 1.76
	TOTAL				₹ 177.37
	Add 3% for sundries & contingencies				₹ 5.32
	Total				₹ 182.69
	Add 15% for contractor's profit and overheads				₹ 27.40
	Cost of 36 cudm.				₹ 210.09
	Cost per cum.				₹ 5,835.83
	Say				₹ 5,835.80
8.20	Extra for additional labour for circular works, such as in frames of fan light:				
8.2.3	Local Teak Wood				

	Description	Unit	Quantity	Rate	Amount
	Details of cost for Chowkhat of a door				
	206.75 x 117.5 cm				
	Extra Materials and labour for wastage @ 10% on quantity of item no 8.1.3				
	Materials :				
08290	Local Teak Wood	10 cudm	3.80	₹ 350.00	₹ 133.00
0473	Carriage of timber	cum	0.0038	₹ 80.65	₹ 0.31
	Labour:				
0208	Carpenter (avg.)	Day	0.072	₹ 400.00	₹ 28.80
0203	Beldar	Day	0.007	₹ 300.00	₹ 2.10
	TOTAL				₹ 164.21
	Add 1% for water charges				₹ 1.64
	TOTAL				₹ 165.85
	Add 3% for sundries & contingencies				₹ 4.98
	Total				₹ 170.83
	Add 15% for contractor's profit and overheads				₹ 25.62
	Cost of 36 cudm. (finished work)				₹ 196.45
	Cost per cum.				₹ 5,456.94
Say					₹ 5,456.90
8.30	Providing laminated veneer lumber conforming to IS: 14616 and TAD -15: 2001(Part B) in factory made frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position as per directions of Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for Chowkhat of a door				
	206.75x117.5cm				
	Materials				
	Laminated veneer lumber including wastage @5%				
	2x206.75x9.5x7.0cm = 0.028 cum.+				
	1x117.50x9.5x7.0cm = 0.008 cum.				
	= 0.036 cum.+				
	Add for wastage @ 5% = 0.002 cum.				
	Grand Total = 0.038 cum.				
08195	Laminated veneer lumber	10 cudm	38.00	₹ 730.00	₹ 2,774.00
0473	Carriage of timber	cum	0.038	₹ 80.65	₹ 3.06
	Labour:				
0209	Carpenter Ist Class	Day	0.20	₹ 425.00	₹ 85.00
0210	Carpenter IInd Class	Day	0.20	₹ 380.00	₹ 76.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 2,998.06
	Add 1 % for water charges				₹ 29.98
	TOTAL				₹ 3,028.04
	Add 3% for sundries & contingencies				₹ 90.84
	Total				₹ 3,118.88

	Add 15% for contractor's profit and overheads				₹ 467.83
	Cost of 36 cudm				₹ 3,586.71
	Cost per cum				₹ 99,630.83
	Say				₹ 99,630.80
8.40	Providing wood work in frames of false ceiling, partitions etc. sawn and put up in position :				
8.4.1	Sal wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for ceiling for a room 3x3m				
	Materials:				
	Salwood				
	$6 \times 3.30 \times (50/1000) \times (125/1000) = 0.1238$ cum. +				
	Cross battens 60mm centre to center 38x50mm.				
	$6 \times 3 \times (38/1000) \times (50/1000) = 0.0342$ cum.				
	= 0.1580 cum. +				
	0.0079 cum.				
	= 0.1659 cum.				
	Say 166 cudm.				
08288	Salwood	10 cudm	166.00	₹ 450.00	₹ 7,470.00
0473	Carriage of timber	cum	0.166	₹ 80.65	₹ 13.39
	Labour:				
0210	Carpenter II nd Class	Day	1.00	₹ 380.00	₹ 380.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 8,163.39
	Add 1 % for water charges				₹ 81.63
	TOTAL				₹ 8,245.02
	Add 3% for sundries & contingencies				₹ 247.35
	Total				₹ 8,492.37
	Add 15% for contractor's profit and overheads				₹ 1,273.86
	Cost of 158 cudm.				₹ 9,766.23
	Cost per cum.				₹ 61,811.58
	Say				₹ 61,811.60
8.40	Providing wood work in frames of false ceiling, partitions etc. sawn and put up in position :				
8.4.2	Karai Wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for ceiling for a room 3x3m				
	Materials:				
	Karai Wood				
	$6 \times 3.30 \times (50/1000) \times (125/1000) = 0.1238$ cum. +				
	Cross battens 60mm centre to center 38x50mm.				
	$6 \times 3 \times (38/1000) \times (50/1000) = 0.0342$ cum.				
	= 0.1580 cum. +				

	Add for wastage @ 5%	=				
	0.0079 cum.					
		=				
	0.1659 cum.					
	Say					
	166 cudm.					
08289	Karai Wood	10 cudm	166.00	₹ 380.00	₹ 6,308.00	
0473	Carriage of timber	cum	0.166	₹ 80.65	₹ 13.39	
	Labour:					
0210	Carpenter II nd Class	Day	1.00	₹ 380.00	₹ 380.00	
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00	
	TOTAL				₹ 7,001.39	
	Add 1 % for water charges				₹ 70.01	
	TOTAL				₹ 7,071.40	
	Add 3% for sundries & contingencies				₹ 212.14	
	Total				₹ 7,283.54	
	Add 15% for contractor's profit and overheads				₹ 1,092.53	
	Cost of 158 cudm.				₹ 8,376.07	
	Cost per cum.				₹ 53,013.10	
	Say				₹ 53,013.10	
8.40	Providing wood work in frames of false ceiling, partitions etc. sawn and put up in position :					
8.4.3	Local Teak Wood					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for ceiling for a room 3x3m					
	Materials:					
	Local Teak Wood					
	$6 \times 3.50 \times (50/1000) \times (125/1000) =$					
	0.1238 cum.					
	Cross battens 60mm centre to center 38x50mm.					
	$6 \times 3 \times (38/1000) \times (50/1000) =$					
	0.0342 cum.					
		=				
	0.1580 cum.					
	Add for wastage @ 5%	=				
	0.0079 cum.					
		=				
	0.1659 cum.					
	Say					
	166 cudm.					
08290	Local Teak Wood	10 cudm	166.00	₹ 350.00	₹ 5,810.00	
0473	Carriage of timber	cum	0.166	₹ 80.65	₹ 13.39	
	Labour:					
0210	Carpenter II nd Class	Day	1.00	₹ 380.00	₹ 380.00	
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00	
	TOTAL				₹ 6,503.39	
	Add 1 % for water charges				₹ 65.03	
	TOTAL				₹ 6,568.42	
	Add 3% for sundries & contingencies				₹ 197.05	
	Total				₹ 6,765.47	
	Add 15% for contractor's profit and overheads				₹ 1,014.82	
	Cost of 158 cudm.				₹ 7,780.29	
	Cost per cum.				₹ 49,242.34	
	Say				₹ 49,242.30	

8.40	Providing wood work in frames of false ceiling, partitions etc. sawn and put up in position :				
8.4.4	Other Wood (Jam, Garjan, Chamal)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for ceiling for a room 3x3m				
	Materials:				
	Other Wood (Jam, Garjan, Chamal)				
	6x3.30x(50/1000)x(125/1000) = 0.1238 cum. +				
	Cross battens 60mm centre to center 38x50mm.				
	6x3x(38/1000)x(50/1000) = 0.0342 cum.				
	=				
	0.1580 cum.+				
	Add for wastage @ 5% = 0.0079 cum.				
	=				
	0.1659 cum.				
	Say 166 cudm.				
08281	Other Wood (Jam, Garjan, Chamal)	10 cudm	166.00	₹ 194.00	₹ 3,220.40
0473	Carriage of timber	cum	0.166	₹ 80.65	₹ 13.39
	Labour:				
0210	Carpenter II nd Class	Day	1.00	₹ 380.00	₹ 380.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 3,913.79
	Add 1 % for water charges				₹ 39.14
	TOTAL				₹ 3,952.93
	Add 3% for sundries & contingencies				₹ 118.59
	Total				₹ 4,071.52
	Add 15% for contractor's profit and overheads				₹ 610.73
	Cost of 158 cudm.				₹ 4,682.25
	Cost per cum.				₹ 29,634.49
	Say				₹ 29,634.50
8.40	Providing wood work in frames of false ceiling, partitions etc. sawn and put up in position :				
8.4.5	Soft Wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for ceiling for a room 3x3m				
	Materials:				
	Soft Wood				
	6x3.30x(50/1000)x(125/1000) = 0.1238 cum. +				
	Cross battens 60mm centre to center 38x50mm.				
	6x3x(38/1000)x(50/1000) = 0.0342 cum.				
	=				
	0.1580 cum.+				
	Add for wastage @ 5% = 0.0079 cum.				

	0.1659 cum.	=				
	Say 166 cudm.					
08282	Soft Wood	10 cudm	166.00	₹ 163.00	₹ 2,705.80	
0473	Carriage of timber	cum	0.166	₹ 80.65	₹ 13.39	
	Labour:					
0210	Carpenter II nd Class	Day	1.00	₹ 380.00	₹ 380.00	
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00	
	TOTAL				₹ 3,399.19	
	Add 1 % for water charges				₹ 33.99	
	TOTAL				₹ 3,433.18	
	Add 3% for sundries & contingencies				₹ 103.00	
	Total				₹ 3,536.18	
	Add 15% for contractor's profit and overheads				₹ 530.43	
	Cost of 158 cudm.				₹ 4,066.61	
	Cost per cum.				₹ 25,738.04	
	Say				₹ 25,738.00	
8.50	Providing and fixing panelled / or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked bright finished / black enamelled M.S butt hinges with necessary screws excluding panelling and or glazing, which will be paid for separately but including the wooden beading of 20 × 12 mm for fixing panelling and or glazing as per direction of Engineer-In-Charge.					
8.5.1	Local Teak wood					
8.5.1.1	35 mm thick shutters					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for shutters of a Door					
	(1/3rd glazed and 2/3rd panelled) 200 × 108 cm					
	= 2.16 sqm					
	Materials:					
	Local Teak wood					
	Styles					
	4×200×10.0×3.5cm = 0.028cum+					
	Rails:					
	Top rails 1×110.5×10.0×3.5cm = 0.004cum.+					
	Bottom rails 1×110.5×20×3.5cm = 0.008cum+					
	Lock rails 1×110.5×15×3.5cm = 0.006cum+					
	Beadings 2×186.1×1.9×1.2cm = 0.001cum.					
	Total = 0.047 cum+					
	Add for wastage @ 10% = 0.005cum					
	Grand Total = 0.051 cum.					
08280	Local Teak wood	10 cudm	51.00	₹ 257.00	₹ 1,310.70	
0473	Carriage of timber	cum	0.051	₹ 80.65	₹ 4.11	

08061	Black enamelled M.S. Butt	10 Nos	6.00	₹	100.00	₹	60.00
	hinges-100x58x1.90 mm						
08063	Black enamelled M.S. Butt	10 Nos	2.00	₹	75.00	₹	15.00
	hinges-50x37x1.5mm						
08066	M.S. Screws 40mm	100 Nos	48.00	₹	60.00	₹	28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹	35.00	₹	2.80
	Labour:						
0208	Carpenter (average)	Day	1.83	₹	400.00	₹	732.00
0203	Beldar	Day	0.76	₹	300.00	₹	228.00
	TOTAL					₹	2,381.41
	Add 1% for water charges					₹	23.81
	TOTAL					₹	2,405.22
	Add 3% for sundries & contingencies					₹	72.16
	Total					₹	2,477.38
	Add 15% for contractor's profit and overheads					₹	371.61
	Cost of 2.16 sqm.					₹	2,848.99
	Cost of 1 sqm.					₹	1,318.98
	Say					₹	1,319.00
8.50	Providing and fixing panelled / or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked bright finished / black enamelled M.S butt hinges with necessary screws excluding panelling and or glazing, which will be paid for separately but including the wooden beading of 20 × 12 mm for fixing panelling and or glazing as per direction of Engineer-In-Charge.						
8.5.1	Local Teak Wood						
8.5.1.2	30 mm thick shutters						
Code	Description	Unit	Quantity		Rate		Amount
	Details of cost for shutters of a Door						
	(1/3rd glazed and 2/3rd panelled) 200 × 108 cm						
	= 2.16 sqm						
	Materials:						
	Local Teak wood						
	Styles						
	4×200×10.0×3.0cm =						
	0.024 cum+						
	Rails:						
	Top rails 1×110.5×9.5×3.0cm =						
	0.003 cum.+						
	Bottom rails 1×110.5×19.7×3.0cm =						
	0.007 cum+						
	Lock rails 1×110.5×15×3.0cm =						
	0.005 cum+						
	Beadings 2×186.1×1.9×1.2cm =						
	0.001 cum.						
	Total =						
	0.040 cum+						
	Add for wastage @ 10% =						
	0.004 cum						
	Grand Total =						
	0.044 cum.						
08280	Local Teak wood	10 cum	44.00	₹	257.00	₹	1,130.80

0473	Carriage of timber	cum	0.044	₹ 80.65	₹ 3.55
08061	Bright finished or black enamelled mild steel	10 Nos	6.00	₹ 100.00	₹ 60.00
	butt hinges - 100×58×1.90 mm				
08063	Bright finished or black enamelled mild steel	10 Nos	2.00	₹ 75.00	₹ 15.00
	butthings - 50×37×1.50 mm				
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour:				
0208	Carpenter (avg)	Day	1.83	₹ 400.00	₹ 732.00
0203	Beldar	Day	0.76	₹ 300.00	₹ 228.00
	TOTAL				₹ 2,200.95
	Add 1% for water charges				₹ 22.01
	TOTAL				₹ 2,222.96
	Add 3% for sundries & contingencies				₹ 66.69
	Total				₹ 2,289.65
	Add 15% for contractor's profit and overheads				₹ 343.45
	Cost of 2.16 sqm.				₹ 2,633.10
	Cost of 1 sqm.				₹ 1,219.03
	Say				₹ 1,219.00
8.50	Providing and fixing panelled / or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked bright finished / black enamelled M.S butt hinges with necessary screws excluding panelling and or glazing, which will be paid for separately but including the wooden beading of 20 × 12 mm for fixing panelling and or glazing as per direction of Engineer-In-Charge.				
8.5.2	Gamair Wood				
8.5.2.1	35 mm thick shutters				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a Door				
	(1/3rd glazed and 2/3rd panelled) 200 × 108 cm				
	=				
	2.16 sqm				
	Materials:				
	Gamair Wood				
	Styles				
	4×200×10.0×3.5cm =				
	0.028 cum+				
	Rails:				
	Top rails 1×110.5×10.0×3.5cm =				
	0.004 cum.+				
	Bottom rails 1×110.5×20×3.5cm =				
	0.008 cum+				
	Lock rails 1×110.5×15×3.5cm =				
	0.006 cum+				
	Beadings 2×186.1×1.9×1.2cm =				
	0.001 cum.				
	Total =				
	0.047 cum+				
	Add for wastage @ 10% =				
	0.005 cum				
	Grand Total =				
	0.051 cum.				

08283	Gamair Wood	10 cudm	51.00	₹	350.00	₹	1,785.00
0473	Carriage of timber	cum	0.051	₹	80.65	₹	4.11
08061	Black enamelled M.S. Butt	10 Nos.	6.00	₹	100.00	₹	60.00
	hinges-100x58xl.9mm						
08063	Black enamelled M.S. Butt	10 Nos.	2.00	₹	75.00	₹	15.00
	hinges-50x37xl.5mm						
08066	M.S. Screws 40mm	100 Nos	48.00	₹	60.00	₹	28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹	35.00	₹	2.80
	Labour:						
0208	Carpenter (Avg.)	Day	1.83	₹	400.00	₹	732.00
0203	Beldar	Day	0.76	₹	300.00	₹	228.00
	TOTAL					₹	2,855.71
	Add 1% for water charges					₹	28.56
	TOTAL					₹	2,884.27
	Add 3% for sundries & contingencies					₹	86.53
	Total					₹	2,970.80
	Add 15% for contractor's profit and overheads					₹	445.62
	Cost of 2.16 sqm.					₹	3,416.42
	Cost of 1 sqm.					₹	1,581.68
	Say					₹	1,581.70
8.50	Providing and fixing panelled / or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked bright finished / black enamelled M.S butt hinges with necessary screws excluding panelling and or glazing, which will be paid for separately but including the wooden beading of 20 × 12 mm for fixing panelling and or glazing as per direction of Engineer-In-Charge.						
8.5.2	Gamair Wood						
8.5.2.2	30 mm thick shutters						
Code	Description	Unit	Quantity	Rate		Amount	
	Details of cost for shutters of a Door						
	(1/3rd glazed and 2/3rd panelled) 200 × 108 cm						
	= 2.16 sqm						
	Materials:						
	Gamair wood						
	Styles						
	4×200×10.0×3.0cm =						
	0.024 cum+						
	Rails:						
	Top rails 1×110.5×9.5×3.0cm = 0.003 cum.+						
	Bottom rails 1×110.5×19.7×3.0cm = 0.007 cum+						
	Lock rails 1×110.5×15×3.0cm = 0.005 cum+						
	Beadings 2×186.1×1.9×1.2cm = 0.001 cum.						
	Total = 0.040 cum+						
	Add for wastage @ 10% = 0.004 cum						

	Grand Total =				
	0.044 cum.				
08283	Gamair Wood	10 cudm	44.00	₹ 350.00	₹ 1,540.00
0473	Carriage of timber	cum	0.044	₹ 80.65	₹ 3.55
08061	Black enemelled M.S. Butt	10 Nos.	6.00	₹ 100.00	₹ 60.00
	hinges-100x58xl.9mm				
08063	Black enemelled M.S. Butt	10 Nos.	2.00	₹ 75.00	₹ 15.00
	hinges-50x37xl .5mm				
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour:				
0208	Carpenter (Avg.)	Day	1.83	₹ 400.00	₹ 732.00
0203	Beldar	Day	0.76	₹ 300.00	₹ 228.00
	TOTAL				₹ 2,610.15
	Add 1% for water charges				₹ 26.10
	TOTAL				₹ 2,636.25
	Add 3% for sundries & contingencies				₹ 79.09
	Total				₹ 2,715.34
	Add 15% for contractor's profit and overheads				₹ 407.30
	Cost of 2.16 sqm.				₹ 3,122.64
	Cost of 1 sqm.				₹ 1,445.67
	Say				₹ 1,445.70
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.1	Local Teak Wood 16 mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Panels 4×47.2×38.65×1.6 cm = 0.0117 cum+				
	Add for wastage @ 10% = 0.0012 cum.				
	Total = 0.0129 cum.				
08280	Local Teak wood	10 cudm	12.90	₹ 257.00	₹ 331.53
0473	Carriage of timber	cum	0.0129	₹ 80.65	₹ 1.04
	Labour:				
0209	Carpenter 1st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 574.82
	Add 1 % for water charges				₹ 5.75
	TOTAL				₹ 580.57
	Add 3% for sundries & contingencies				₹ 17.42
	Total				₹ 597.99

	Add 15% for contractor's profit and overheads				₹ 89.70
	Cost of 0.67 sqm.				₹ 687.69
	Cost of 1 sqm.				₹ 1,026.40
	Say				₹ 1,026.40
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.2	Gamair Wood 16 mm Thick				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Gamair Wood				
	Panels 4×47.2×38.65×1.6 cm = 0.0117 cum+				
	Add for wastage @ 10% = 0.0012 cum.				
	Total = 0.0129 cum.				
08283	Gamair Wood	10 cudm	12.90	₹ 350.00	₹ 451.50
0473	Carriage of timber	cum	0.0129	₹ 80.65	₹ 1.04
	Labour & sundries				
0209	Carpenter 1 st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 694.79
	Add 1 % for water charges				₹ 6.95
	TOTAL				₹ 701.74
	Add 3% for sundries & contingencies				₹ 21.05
	Total				₹ 722.79
	Add 15% for contractor's profit and overheads				₹ 108.42
	Cost of 0.67 sqm.				₹ 831.21
	Cost of 1 sqm.				₹ 1,240.61
Say					₹ 1,240.60
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.3	Ply wood 5 ply, 9 mm thick :				
8.6.3.1	Decorative plywood both side decorative veneer (Type -1) conforming to IS 1328 BWR type.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				

	Plywood (9mm thick)				
	4×47.2×38.65 cm = 0.73 sqm+				
	Add for wastage @ 10% 0.07 sqm.	=			
	Total 0.80 sqm.	=			
08163	Ply wood 5 ply with teak ply on both faces 9 mm thick	sqm	0.80	₹ 920.00	₹ 736.00
0473	Carriage of Plywood	Cum	0.0072	₹ 80.65	₹ 0.58
	Labour:				
0209	Carpenter 1 st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 978.83
	Add 1 % for water charges				₹ 9.79
	TOTAL				₹ 988.62
	Add 3% for sundries & contingencies				₹ 29.66
	Total				₹ 1,018.28
	Add 15% for contractor's profit and overheads				₹ 152.74
	Cost of 0.67 sqm.				₹ 1,171.02
	Cost of 1 sqm.				₹ 1,747.79
	Say				₹ 1,747.80
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.3	Ply wood 5 ply, 9 mm thick :				
8.6.3.2	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Plywood (9mm thick)				
	4×47.2×38.65 cm = 0.73 sqm+				
	Add for wastage @ 10% 0.07 sqm.	=			
	Total 0.80 sqm.	=			
08164	Ply wood 5 ply with teak ply on one face and commercial ply on another	sqm	0.80	₹ 722.00	₹ 577.60
0473	Carriage of Plywood	Cum	0.0072	₹ 80.65	₹ 0.58
	Labour:				
0209	Carpenter 1 st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 820.43
	Add 1 % for water charges				₹ 8.20
	TOTAL				₹ 828.63
	Add 3% for sundries & contingencies				₹ 24.86
	Total				₹ 853.49
	Add 15% for contractor's profit and overheads				₹ 128.02
	Cost of 0.67 sqm.				₹ 981.51

	Cost of 1 sqm.				₹ 1,464.94
Say					₹ 1,464.90
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.4	Ply wood 7 ply, 9 mm thick :				
8.6.4.1	Decorative plywood both side decorative veneer (Type -1) conforming to IS 1328 BWR type.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Plywood (9mm thick)				
	4×47.2×38.65 cm = 0.73 sqm+				
	Add for wastage @ 10% = 0.07 sqm.				
	Total = 0.80 sqm.				
08284	Ply wood 7 ply with teak ply on both faces 9 mm thick	sqm	0.80	₹ 700.00	₹ 560.00
0473	Carriage of Plywood	Cim	0.0072	₹ 80.65	₹ 0.58
	Labour:				
0209	Carpenter 1 st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 802.83
	Add 1 % for water charges				₹ 8.03
	TOTAL				₹ 810.86
	Add 3% for sundries & contingencies				₹ 24.33
	Total				₹ 835.19
	Add 15% for contractor's profit and overheads				₹ 125.28
	Cost of 0.67 sqm.				₹ 960.47
	Cost of 1 sqm.				₹ 1,433.54
Say					₹ 1,433.50
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.4	Ply wood 7 ply, 9 mm thick :				
8.6.4.2	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Plywood (9mm thick)				

	4×47.2×38.65 cm = 0.73 sqm+				
	Add for wastage @ 10% 0.07 sqm.	=			
	Total 0.80 sqm.	=			
08165	Ply wood 7 ply with teak ply on both faces 9 mm thick	sqm	0.80	₹ 825.00	₹ 660.00
0473	Carriage of Plywood	Cum	0.0072	₹ 80.65	₹ 0.58
	Labour:				
0209	Carpenter 1 st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 902.83
	Add 1 % for water charges				₹ 9.03
	TOTAL				₹ 911.86
	Add 3% for sundries & contingencies				₹ 27.36
	Total				₹ 939.22
	Add 15% for contractor's profit and overheads				₹ 140.88
	Cost of 0.67 sqm.				₹ 1,080.10
	Cost of 1 sqm.				₹ 1,612.09
Say					₹ 1,612.10
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.5	Particle Board 12 mm thick				
8.6.5.1	Plain particle board flat pressed, 3 layer or graded wood particle board medium density Grade I, IS : 3087 marked.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Partical Board				
	4×47.2×38.65 cm = 0.73 sqm+				
	Add for wastage @ 10% 0.07 sqm.	=			
	Total 0.80 sqm.	=			
08002	Particle board 12mm thick	sqm	0.80	₹ 364.00	₹ 291.20
0473	Carriage of Plywood	Cum	0.0096	₹ 80.65	₹ 0.77
	Labour:				
0209	Carpenter 1st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 534.22
	Add 1 % for water charges				₹ 5.34
	TOTAL				₹ 539.56
	Add 3% for sundries & contingencies				₹ 16.19
	Total				₹ 555.75
	Add 15% for contractor's profit and overheads				₹ 83.36
	Cost of 0.67 sqm.				₹ 639.11
	Cost of 1 sqm.				₹ 953.90
Say					₹ 953.90

8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.5	Particle Board 12 mm thick				
8.6.5.2	Veneered flat pressed three layer or graded wood particle board with commercial veneering on both sides conforming to IS:3097, grade I.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Particle Board 12 mm thick				
	4×47.2×38.65 cm				
	= 0.73 sqm+				
	Add for wastage @ 10% = 0.07 sqm.				
	Total = 0.80 sqm.				
08214	Veneered particle board with commercial veneering on both sides 12 mm thick	sqm	0.80	₹ 525.00	₹ 420.00
0473	Carriage of Plywood	Cum	0.0096	₹ 80.65	₹ 0.77
	Labour:				
0209	Carpenter 1st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 663.02
	Add 1 % for water charges				₹ 6.63
	TOTAL				₹ 669.65
	Add 3% for sundries & contingencies				₹ 20.09
	Total				₹ 689.74
	Add 15% for contractor's profit and overheads				₹ 103.46
	Cost of 0.67 sqm.				₹ 793.20
	Cost of 1 sqm.				₹ 1,183.88
	Say				₹ 1,183.90
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.5	Particle Board 12 mm thick				
8.6.5.3	Prelaminated particle board with decorative lamination on one side and balancing lamination on other side, Grade I, Type II IS: 12823 marked.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Partical Board				
	4×47.2×38.65 cm				
	= 0.73 sqm+				
	Add for wastage @ 10% = 0.07 sqm.				

	Total = 0.80 sqm.				
08215	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 12 mm thick	sqm	0.80	₹ 785.00	₹ 628.00
0473	Carriage of Plywood	Cum	0.0096	₹ 80.65	₹ 0.77
	Labour:				
0209	Carpenter 1st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 871.02
	Add 1 % for water charges				₹ 8.71
	TOTAL				₹ 879.73
	Add 3% for sundries & contingencies				₹ 26.39
	Total				₹ 906.12
	Add 15% for contractor's profit and overheads				₹ 135.92
	Cost of 0.67 sqm.				₹ 1,042.04
	Cost of 1 sqm.				₹ 1,555.28
	Say				₹ 1,555.30
8.60	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 to 40 mm thick.				
8.6.5	Particle Board 12 mm thick				
8.6.5.4	Prelaminated particle board with decorative lamination on both sides, Grade I, Type II, IS: 12823 marked.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a door with				
	2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area 4 × 45.10 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Partical Board				
	4×47.2×38.65 cm = 0.73 sqm+				
	Add for wastage @ 10% = 0.07 sqm.				
	Total = 0.80 sqm.				
08218	Prelaminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 12 mm thick	sqm	0.80	₹ 815.00	₹ 652.00
0473	Carriage of Plywood	Cum	0.0096	₹ 80.65	₹ 0.77
	Labour:				
0209	Carpenter 1st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 895.02
	Add 1 % for water charges				₹ 8.95
	TOTAL				₹ 903.97
	Add 3% for sundries & contingencies				₹ 27.12
	Total				₹ 931.09

	Add 15% for contractor's profit and overheads				₹	139.66
	Cost of 0.67 sqm.				₹	1,070.75
	Cost of 1 sqm.				₹	1,598.13
	Say				₹	1,598.10
8.70	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass (weight not less than 10ks/Sqm) panes including black enamelled ISI marked MS butt hinges with necessary screws.					
8.7.1	Local Teak wood					
8.7.1.1	35 mm thick					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for shutter of a door (glazed)					
	200×108cm = 2.16 sqm					
	Materials :					
	(i) Teak wood					
	Styles :					
	4×200×9.5×3.5cm = 0.027 cum					
	Rails :					
	Top & intermediate rails					
	2×110.5×9.5×3.5cm = 0.008 cum					
	Lock and bottom rails					
	2×110.5×19.7×3.5cm = 0.015 cum					
	Beadings :					
	Total = 0.053 cum					
	Add for wastage @ 10% = 0.005 cum					
	Grand Total = 0.058 cum					
08280	Local Teak wood	10 cudm	58.00	₹ 257.00	₹	1,490.60
08146	(ii) Float glasses 4.0mm thick	sqm	1.27	₹ 360.00	₹	457.20
08061	(iii) Black enamelled M.S. butt hinges-100x58x1.90mm	10 Nos	6.00	₹ 100.00	₹	60.00
08063	Black enamelled M.S. butt hinges-50x37x1.50mm	10 Nos	2.00	₹ 75.00	₹	15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹	28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹	2.80
0473	Carriage of Timber	cum	0.058	₹ 80.65	₹	4.68
	Labour:					
0208	Carpenter (Avg.)	Day	1.83	₹ 400.00	₹	732.00
0217	Glazier	Day	0.23	₹ 380.00	₹	87.40
0203	Beldar	Day	0.77	₹ 300.00	₹	231.00
	TOTAL				₹	3,109.48
	Add 1 % for water charges				₹	31.09
	TOTAL				₹	3,140.57
	Add 3% for sundries & contingencies				₹	94.22
	Total				₹	3,234.79
	Add 15% for contractor's profit and overheads				₹	485.22

	Cost of 2.16 sqm.				₹	3,720.01
	Cost of 1 sqm.				₹	1,722.23
	Say				₹	1,722.20
8.70	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass (weight not less than 10ks/Sqm) panes including black enamelled ISI marked MS butt hinges with necessary screws.					
8.7.1	Local Teak wood					
8.7.1.2	30 mm thick					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for shutter of a door (glazed)					
	200×108 cm = 2.16 sqm					
	Materials :					
	(i) Teak wood					
	Styles :					
	4×200×9.5×3.0 cm = 0.023 cum +					
	Rails					
	Top & intermediate rails					
	2×110.5×9.5×3.0 cm = 0.006 cum+					
	Lock and bottom rails					
	2×110.5×19.7×3.0 cm = 0.013 cum+					
	Beadings-					
	2×186.1×1.9×1.2 cm = 0.001 cum+					
	4×171.70×1.9×1.2 cm = 0.002 cum					
	Total = 0.045 cum+					
	Add for wastage @ 10% = 0.005 cum					
	Grand Total = 0.050 cum					
08280	Local Teak wood	10 cudm	50.00	₹ 257.00	₹	1,285.00
08146	(ii) Float glasses 4.0mm thick	sqm	1.27	₹ 360.00	₹	457.20
08061	(iii) Black enamelled M.S. butt hinges-100x58x1.90mm	10 Nos	6.00	₹ 100.00	₹	60.00
08063	Black enamelled M.S. butt hinges-50x3 7x 1.50mm	10 Nos	2.00	₹ 75.00	₹	15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹	28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹	2.80
0473	Carriage of timber	cum	0.05	₹ 80.65	₹	4.03
	Labour:					
0208	Carpenter (Avg.)	Day	1.83	₹ 400.00	₹	732.00
0217	Glazier	Day	0.23	₹ 380.00	₹	87.40
0203	Beldar	Day	0.77	₹ 300.00	₹	231.00
	TOTAL				₹	2,903.23
	Add 1 % for water charges				₹	29.03
	TOTAL				₹	2,932.26
	Add 3% for sundries & contingencies				₹	87.97

	Total				₹	3,020.23
	Add 15% for contractor's profit and overheads				₹	453.03
	Cost of 2.16 sqm.				₹	3,473.26
	Cost of 1 sqm.				₹	1,607.99
	Say				₹	1,608.00
8.70	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass (weight not less than 10ks/Sqm) panes including black enamelled ISI marked MS butt hinges with necessary screws.					
8.7.2	Gamair Wood					
8.7.2.1	35 mm thick					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for shutter of a door (glazed)					
	200×108					
	Materials :					
	(i) Gamair					
	Styles :					
	Rails :					
	Top & intermediate rails					
	Lock and bottom rails					
	Beadings :					
	Total = 0.053 cum					
	Add for wastage @ 10% = 0.005 cum					
	Grand Total = 0.058 cum					
08283	Gamair Wood	10 cudm	58.00	₹ 350.00	₹	2,030.00
08146	Float glassess 4.0 mm thick	sqm	1.27	₹ 360.00	₹	457.20
08061	Black enamelled M.S. Butt hinges-					
	100x58x1.90mm	10 Nos	6.00	₹ 100.00	₹	60.00
	Black enamelled M.S. Butt hinges-					
08063	50x37x 1.50mm	10 Nos	2.00	₹ 75.00	₹	15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹	28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹	2.80
0473	Carriage of timber	cum	0.058	₹ 80.65	₹	4.68
0.00	Labour:					
0208	Carpenter (Avg.)	Day	1.83	₹ 400.00	₹	732.00
0217	Glazier	Day	0.23	₹ 380.00	₹	87.40
0203	Beldar	Day	0.77	₹ 300.00	₹	231.00
	TOTAL				₹	3,648.88
	Add 1 % for water charges				₹	36.49
	TOTAL				₹	3,685.37
	Add 3% for sundries & contingencies				₹	110.56
	Total				₹	3,795.93
	Add 15% for contractor's profit and overheads				₹	569.39
	Cost of 2.16 sqm.				₹	4,365.32
	Cost of 1 sqm.				₹	2,020.98
	Say				₹	2,021.00

8.70	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass (weight not less than 10ks/Sqm) panes including black enamelled ISI marked MS butt hinges with necessary screws.				
8.7.2	Gamair Wood				
8.7.2.2	30 mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutter of a door (glazed)				
	200×108				
	cm = 2.16 sqm				
	Materials :				
	(i) Gamair wood				
	Styles :				
	4×200×9.5×3.0 cm				
	= 0.023 cum +				
	Rails				
	Top & intermediate rails				
	2×110.5×9.5×3.0 cm				
	= 0.006 cum+				
	Lock and bottom rails				
	2×110.5×19.7×3.0 cm				
	= 0.013 cum+				
	Beatings-				
	2×186.1×1.9×1.2 cm				
	= 0.001 cum+				
	4×171.70×1.9×1.2				
	cm = 0.002 cum				
	Total				
	= 0.045 cum+				
	Add for wastage @ 10%				
	= 0.005 cum				
	Grand Total				
	= 0.050 cum				
08283	Gamair Wood	10 cudm	50.00	₹ 350.00	₹ 1,750.00
08146	Float glassess 4.0 mm thick	sqm	1.27	₹ 360.00	₹ 457.20
08061	Black enamelled M.S. Butt hinges-	10 Nos	6.00	₹ 100.00	₹ 60.00
	100x58x1.90mm				
08063	Black enamelled M.S. Butt hinges-	10 Nos	2.00	₹ 75.00	₹ 15.00
	50x37x 1.50mm				
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
0473	Carriage of timber	cum	0.05	₹ 80.65	₹ 4.03
	Labour:				
0208	Carpenter (Avg.)	Day	1.83	₹ 400.00	₹ 732.00
0217	Glazier	Day	0.23	₹ 380.00	₹ 87.40
0203	Beldar	Day	0.77	₹ 300.00	₹ 231.00
	TOTAL				₹ 3,368.23
	Add 1 % for water charges				₹ 33.68
	TOTAL				₹ 3,401.91
	Add 3% for sundries & contingencies				₹ 102.06
	Total				₹ 3,503.97
	Add 15% for contractor's profit and overheads				₹ 525.60
	Cost of 2.16 sqm.				₹ 4,029.57

	Cost of 1 sqm.				₹ 1,865.54
	Say				₹ 1,865.50
8.80	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS 14616 and TADS 15:2001 (Part B), using 4mm thick float glass panes for doors, windows and clerestory windows including ISI marked black enamelled M.S butt hinges with necessary screws as per direction of Engineer-in-charge.				
8.8.1	30 mm thick shutters				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost of one shutter				
	220 × 108 cm = 2.38 sqm.				
	Materials:				
08192	Factory, made shutters glazed laminated veneer lumber door shutter	sqm	2.38	₹ 1,700.00	₹ 4,046.00
0473	Carriage of shutters	Cum	0.0714	₹ 80.65	₹ 5.76
	Fittings:				
08061	Black enamelled M.S. Butt hinges-	10 Nos	6.00	₹ 100.00	₹ 60.00
	100x58x1.90mm				
08063	Black enamelled M.S. Butt hinges-	10 Nos	2.00	₹ 75.00	₹ 15.00
	50x37x 1.50mm				
08066	M.S. Screws-40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. Screws-20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour:				
0208	Carpenter (Avg.)	Day	0.52	₹ 400.00	₹ 208.00
0203	Beldar	Day	0.60	₹ 300.00	₹ 180.00
	TOTAL				₹ 4,546.36
	Add 1% for water charges				₹ 45.46
	TOTAL				₹ 4,591.82
	Add 3% for sundries & contingencies				₹ 137.75
	Total				₹ 4,729.57
	Add 15% for contractor's profit and overheads				₹ 709.44
	Cost of 2.38 sqm.				₹ 5,439.01
	Cost of 1 sqm.				₹ 2,285.30
	Say				₹ 2,285.30
8.90	Extra for providing heavy sheet float glass panes instead of ordinary float glass in glazed doors, window and clerestory window shutters (Area of opening of glass panes excluding portion inside rebate shall be measured)				
8.9.1	5.5mm thick instead of 4mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one sqm.				
	Materials:				
08147	Glasse Panes of 13.75 kg per sqm.	sqm	1.00	₹ 535.00	₹ 535.00
08146	Deduct panels of 10 kg per sqm.	sqm	1.00	₹ 360.00	₹ 360.00
	Net Cost				₹ 175.00
	Add 1 % for water charges				₹ 1.75
	TOTAL				₹ 176.75
	Add 3% for sundries & contingencies				₹ 5.30
	Total				₹ 182.05
	Add 15% for contractor's profit and overheads				₹ 27.31
	Cost of 1 sqm.				₹ 209.36

	Say				₹ 209.40
8.10	Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).				
Code	Description	Unit	Quantity	Rate	Amount
	Cost for 1 sqm.				
	Materials:				
08174	Froasted glass panes (4.0mm)	sqm	1.00	₹ 400.00	₹ 400.00
08146	Deduct cost of ordinary glass panes (4.0mm thick)	sqm	1.00	₹ 360.00	₹ 360.00
	Net Cost				₹ 40.00
	Add 1 % for water charges				₹ 0.40
	TOTAL				₹ 40.40
	Add 3% for sundries & contingencies				₹ 1.21
	Total				₹ 41.61
	Add 15% for contractor's profit and overheads				₹ 6.24
	Cost of 1 sqm.				₹ 47.85
	Say				₹ 47.90
8.11	Deduct for providing pin headed glass panes instead of ordinary float glass panes weighing 4 mm thick in doors, windows and clerestory windows, shutters (Area of opening for glass panes excluding portion inside rebate shall be measured).				
Code	Description	Unit	Quantity	Rate	Amount
	Cost for 1 sqm.				
	Materials:				
08213	Pin headed glass panes (4.0 mm)	sqm	1.00	₹ 345.00	₹ 345.00
08146	Deduct cost of ordinary glass panes (4.0 mm thick)	sqm	1.00	₹ 360.00	₹ 360.00
	Net Cost				₹ 15.00
	Add 1 % for water charges				₹ 0.15
	Add 3% for sundries & contingencies				₹ 15.15
	Total				₹ 0.45
	TOTAL				₹ 15.60
	Add 15% for contractor's profit and overheads				₹ 2.34
	Cost of 1 sqm.				₹ 17.94
	Say				₹ 17.90
8.12	Extra for providing ISI marked Stainless Steel butt hinges instead of black enamelled M.S. butt hinges with necessary screws. (Shutter area to be measured).				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one door shutter of a door				
	200 × 108 cm = 2.16 sqm.				
	Stainless steel butt hinges-				
08248	100 × 60 × 2.5 mm	10 Nos	6.00	₹ 270.00	₹ 162.00
08246	50 × 37 × 1.5 mm	10 Nos	2.00	₹ 150.00	₹ 30.00
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹ 215.00	₹ 103.20
08242	Stainless steel screws 20 mm	100 Nos	8.00	₹ 120.00	₹ 9.60
	Deduct				
	Black enameled butt hinges				

08061	100 × 58 × 1.90 mm	10 Nos	6.00	₹ 100.00	₹ -60.00
08063	50 × 37 × 1.50 mm	10 Nos	2.00	₹ 75.00	₹ -15.00
	Black enameled Iron				
08066	Screws-40mm	100 Nos	48.00	₹ 60.00	₹ -28.80
08069	Screws-20mm	100 Nos	8.00	₹ 35.00	₹ -2.80
	TOTAL				₹ 198.20
	Add 1 % for water charges				₹ 1.98
	TOTAL				₹ 200.18
	Add 3% for sundries & contingencies				₹ 6.01
	Total				₹ 206.19
	Add 15% for contractor's profit and overheads				₹ 30.93
	Extra cost of 2.16sqm. of shutter area				₹ 237.12
	Extra cost of 1 sqm. of shutter area				₹ 109.78
	Say				₹ 109.80
8.13	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B) including ISI marked black enamelled M.S. butt hinges with necessary screws as per directions of Engineer-in-charge and panelling with panels of:				
8.13.1	12mm thick plain grade - 1, medium density flat pressed three layer particle board FPT - I or graded wood particle board FPT - I, IS : 3087 marked bonded with BWP type synthetic resin adhesive as per IS : 848 :				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost of one shutter				
	220 × 108 cm = 2.38 sqm.				
	Materials:				
	Factory made shutters LVL syles, rails and panels				
08189	Plain particle board	sqm	2.38	₹ 1,850.00	₹ 4,403.00
0473	Carriage of shutters	Cum	0.0833	₹ 80.65	₹ 6.72
	Fittings:				
08061	Black enamelled M.S. Butt hinges- 100 × 58 × 1.9 mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	Black enamelled M.S. Butt hinges - 50 × 37 × 1.5	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour:				
0208	Carpenter Average	Day	0.52	₹ 400.00	₹ 208.00
0203	Beldar	Day	0.60	₹ 300.00	₹ 180.00
	TOTAL				₹ 4,904.32
	Add 1% for water charges				₹ 49.04
	TOTAL				₹ 4,953.36
	Add 3% for sundries & contingencies				₹ 148.60
	Total				₹ 5,101.96
	Add 15% for contractor's profit and overheads				₹ 765.29
	Extra cost of 2.38 sqm. of shutter area				₹ 5,867.25

	Extra cost of 1 sqm. of shutter area				₹ 2,465.23
	Say				₹ 2,465.20
8.13	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B) including ISI marked black enamelled M.S. butt hinges with necessary screws as per directions of Engineer-in-charge and panelling with panels of :				
8.13.2	12 mm thick prelaminated (with particle board decorative lamination on both sides) grade - 1, medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT - 1, conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS:848 and prelamination confirming to IS : 12823 Grade 1, Type - II marked:				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost of one shutter				
	220 × 108 cm = 2.38 sqm.				
	Materials:				
	Factory made shutters LVL styles, rails and panels				
08190	Plain particle board	sqm	2.38	₹ 2,050.00	₹ 4,879.00
0473	Carriage of shutters	Cum	0.0833	₹ 80.65	₹ 6.72
	Fittings:				
08061	Black enamelled M.S. Butt hinges- 100 × 58 × 1.9 mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	Black enamelled M.S. Butt hinges - 50 × 37 × 1.5mm	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour:				
0208	Carpenter Average	Day	0.52	₹ 400.00	₹ 208.00
0203	Beldar	Day	0.60	₹ 300.00	₹ 180.00
	TOTAL				₹ 5,380.32
	Add 1% for water charges				₹ 53.80
	TOTAL				₹ 5,434.12
	Add 3% for sundries & contingencies				₹ 163.02
	Total				₹ 5,597.14
	Add 15% for contractor's profit and overheads				₹ 839.57
	Cost of 2.38 sqm.				₹ 6,436.71
	Cost of 1 sqm.				₹ 2,704.50
	Say				₹ 2,704.50
8.13	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B) including ISI marked black enamelled M.S. butt hinges with necessary screws as per directions of Engineer-in-charge and panelling with panels of :				
8.13.3	12 mm thick one side prelaminated (with particle board decorative lamination on other sides) and balancing lamination grade - 1 medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT-1 conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS : 848 and prelamination confirming to IS : 12823 Grade - 1, Type II marked :				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost of one shutter				
	220x108cm = 2.38sqm.				
	Materials:				

	Factory made shutters LVL syles, rails and panels				
08191	Plain particle board	sqm	2.38	₹ 2,000.00	₹ 4,760.00
0473	Carriage of shutters	Cum	0.0833	₹ 80.65	₹ 6.72
	Fittings:				
08061	Black enamelled M.S. Butt hinges- 100 × 58 × 1.9 mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	Black enamelled M.S. Butt hinges - 50 × 37 × 1.5 mm	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour:				
0208	Carpenter Average	Nos	0.52	₹ 400.00	₹ 208.00
0203	Beldar	Nos	0.60	₹ 300.00	₹ 180.00
	TOTAL	Day			₹ 5,261.32
	Add 1% for water charges				₹ 52.61
	TOTAL				₹ 5,313.93
	Add 3% for sundries & contingencies				₹ 159.42
	Total				₹ 5,473.35
	Add 15% for contractor's profit and overheads				₹ 821.00
	Cost of 2.38 sqm.				₹ 6,294.35
	Cost of 1 sqm.				₹ 2,644.68
	Say				₹ 2,644.70
8.14	Providing and fixing 25 mm thick shutters for cup board etc. :				
8.14.1	Panelled or panelled & glazed shutters :				
8.14.1.1	Local teak wood including ISI marked anodised aluminium butt hinges with necessary screws.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a cup-board (half				
	glazed and half panelled) 200 × 108 cm = 2.16 sqm.				
	Materials: Styles-4 × 200 × 8.0 × 2.5 cm = 0.016 cum+				
	Rails-Top rail-1 × 110.5 × 8.0 × 2.5 cm = 0.0022 cum+				
	Lock and bottom rail- 2 × 110.5 × 8.0 × 2.5 cm = 0.0044 cum.+				
	Panels- 2 × 48 × 41 × 1.6 cm = 0.006 cum+				
	Sash bars- 2 × 114 × 3.8 × 2.5cm = 0.003 cum+				
	6 × 48 × 3.8 × 2.5 cm = 0.003 cum+				
	Beading- 16 × 92 × 1.4 × 1.2 cm = 0.002 cum				
	Total =0.0366 cum				
	Add for wastage @ 10% =0.0037 cum.				
	Grand Total = 0.0403 cum or 40 cudm				
08280	Local Teak Wood- scantling	10 cudm	40.00	₹ 257.00	₹ 1,028.00

0473	Carriage of timber	cum	0.04	₹ 80.65	₹ 3.23
08146	Float glasses 4.0mm thick	sqm	0.99	₹ 360.00	₹ 356.40
	Fittings-				
08112	Anodised aluminium butt hinges- 75×45×3.2 mm	10 Nos	6.00	₹ 230.00	₹ 138.00
08053	C.P. brass screws 40mm	100 Nos	48.00	₹ 228.00	₹ 109.44
	Labour-				
0209	Carpenter 1st class	Day	2.40	₹ 425.00	₹ 1,020.00
0217	Glazier	Day	0.18	₹ 380.00	₹ 68.40
0203	Beldar	Day	0.77	₹ 300.00	₹ 231.00
	TOTAL				₹ 2,954.47
	Add 1 % for water charges				₹ 29.54
	TOTAL				₹ 2,984.01
	Add 3% for sundries & contingencies				₹ 89.52
	Total				₹ 3,073.53
	Add 15% for contractor's profit and overheads				₹ 461.03
	Cost of 2.16 sqm.				₹ 3,534.56
	Cost of 1 sqm.				₹ 1,636.37
	Say				₹ 1,636.40
8.14	Providing and fixing 25 mm thick shutters for cup board etc. :				
8.14.1	Glazed shutters:				
8.14.1.2	Local teak wood including ISI marked anodised aluminium butt hinge with necessary screws.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutter of cup-board				
	200 × 108cm = 2.16 sqm.				
	Materials :				
	Local Teak Wood- scantling				
	Styles : 4 × 200 × 9.5 × 2.5 cm = 0.019 cum				
	Rails				
	Top & intermediate rails				
	2 × 110.5 × 9.5 × 2.5 cm = 0.006 cum				
	Lock and bottom rails				
	2 × 110.5 × 19.7 × 2.5 cm = 0.011 cum				
	Beadings-				
	2 × 186.1 × 1.9 × 1.2 cm = 0.001 cum+				
	4 × 171.70 × 1.9 × 1.2 cm = 0.002 cum.				
	Total = 0.039 cum.				
	Add for wastage @ 10% = 0.004 cum.				
	Grand Total = 0.043 cum = 43 cudm				
08280	Local Teak Wood- scantling	10 cudm	43.00	₹ 257.00	₹ 1,105.10
08146	(ii) Glasses (10kg/sqm) 4.0mm thick	sqm	1.27	₹ 360.00	₹ 457.20
08064	(iii) Piano hinges 75×45×3.2 mm	metre	0.60	₹ 50.00	₹ 30.00
08068	(iv)M.S. screws 25 mm	100 Nos	48.00	₹ 45.00	₹ 21.60
0473	(v) Carriage of timber	cum	0.043	₹ 80.65	₹ 3.47
	Labour:				

0208	Carpenter (Avg.)	Day	1.83	₹	400.00	₹	732.00
0217	Glazier	Day	0.23	₹	380.00	₹	87.40
0203	Beldar	Day	0.77	₹	300.00	₹	231.00
	TOTAL					₹	2,667.77
	Add 1 % for water charges					₹	26.68
	TOTAL					₹	2,694.45
	Add 3% for sundries & contingencies					₹	80.83
	Total					₹	2,775.28
	Add 15% for contractor's profit and overheads					₹	416.29
	Cost of 2.16 sqm.					₹	3,191.57
	Cost of 1 sqm.					₹	1,477.58
	Say					₹	1,477.60
8.15	Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS : 3087 marked to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately):						
8.15.1	12 mm thick						
Code	Description	Unit	Quantity	Rate		Amount	
	Details of cost for 350 × 200 cm = 7.00 sqm.						
	Materials-						
	12mm thick particle board = 7.00 sqm.+						
	Add wastage @ 5% = 0.35 sqm.						
08002	Total = 7.35 sqm.	sqm	7.35	₹	364.00	₹	2,675.40
0473	Carriage of particle board	Cum	0.0882	₹	80.65	₹	7.11
	Labour-						
0210	Carpenter 2nd class	Day	0.90	₹	380.00	₹	342.00
0203	Beldar	Day	1.00	₹	300.00	₹	300.00
	TOTAL					₹	3,324.51
	Add 1 % for water charges					₹	33.25
	TOTAL					₹	3,357.76
	Add 3% for sundries & contingencies					₹	100.73
	Total					₹	3,458.49
	Add 15% for contractor's profit and overheads					₹	518.77
	Cost of 7 sqm.					₹	3,977.26
	Cost of 1 sqm.					₹	568.18
	Say					₹	568.20
8.15	Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS : 3087 marked to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately):						
8.15.2	18 mm thick						
Code	Description	Unit	Quantity	Rate		Amount	
	Details of cost for 350 × 200 cm = 7.00 sqm.						
	Materials-						
	12mm thick particle board = 7.00 sqm.+						
	Add wastage @ 5% = 0.35 sqm.						

08182	Total = 7.35 sqm.	sqm	7.35	₹	455.00	₹	3,344.25
0473	Carriage of particle board	Cum	0.1323	₹	80.65	₹	10.67
	Labour-						
0210	Carpenter 2nd class	Day	0.90	₹	380.00	₹	342.00
0203	Beldar	Day	1.00	₹	300.00	₹	300.00
	TOTAL					₹	3,996.92
	Add 1 % for water charges					₹	39.97
	TOTAL					₹	4,036.89
	Add 3% for sundries & contingencies					₹	121.11
	Total					₹	4,158.00
	Add 15% for contractor's profit and overheads					₹	623.70
	Cost of 7 sqm.					₹	4,781.70
	Cost of 1 sqm.					₹	683.10
	Say					₹	683.10
8.16	Providing and fixing prelaminate flat pressed 3 layer (medium density) particle board or graded wood particle board IS: 3087 marked with one side decorative and other side balancing lamination Grade I, Type II exterior grade IS : 12823 marked in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately)						
8.16.1	18mm thick						
Code	Description	Unit	Quantity	Rate	Amount		
	Details of cost for 4 nos 75× 20 cm shelves = 0.60 sqm						
	Materials-						
	18mm thick particle board = 4×75×20 cm = 0.60 sqm.+						
	Wastage @ 5% = 0.03 sqm						
08216	Total = 0.63 sqm.	sqm	0.63	₹	890.00	₹	560.70
0473	Carriage of board	Cum	0.01134	₹	80.65	₹	0.91
	Labour-						
0210	Carpenter 2nd class	Day	0.11	₹	380.00	₹	41.80
0203	Beldar	Day	0.06	₹	300.00	₹	18.00
	TOTAL					₹	621.41
	Add 1 % for water charges					₹	6.21
	TOTAL					₹	627.62
	Add 3% for sundries & contingencies					₹	18.83
	Total					₹	646.45
	Add 15% for contractor's profit and overheads					₹	96.97
	Cost of 0.60 sqm.					₹	743.42
	Cost per sqm.					₹	1,239.03
	Say					₹	1,239.00
8.16	Providing and fixing prelaminate flat pressed 3 layer (medium density) particle board or graded wood particle board IS: 3087 marked with one side decorative and other side balancing lamination Grade I, Type II exterior grade IS: 12823 marked in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately).						
8.16.2	25 mm thick						
Code	Description	Unit	Quantity	Rate	Amount		
	Details of cost for 4 nos 75 × 20 cm shelves = 0.60 sqm						

	Materials-				
	25mm thick particle board = $4 \times 75 \times 20$ cm = 0.60 sqm.+				
	Wastage @ 5% = 0.03 sqm				
08217	Total = 0.63 sqm.	sqm	0.63	₹ 960.00	₹ 604.80
0473	Carriage of board	Cum	0.01575	₹ 80.65	₹ 1.27
	Labour-				
0210	Carpenter 2nd class	Day	0.11	₹ 380.00	₹ 41.80
0203	Beldar	Day	0.06	₹ 300.00	₹ 18.00
	TOTAL				₹ 665.87
	Add 1 % for water charges				₹ 6.66
	TOTAL				₹ 672.53
	Add 3% for sundries & contingencies				₹ 20.18
	Total				₹ 692.71
	Add 15% for contractor's profit and overheads				₹ 103.91
	Cost of 0.60 sqm.				₹ 796.62
	Cost per sqm.				₹ 1,327.70
	Say				₹ 1,327.70
8.17	Providing and fixing 25 mm thick shutters for cupboards etc. including ISI marked black enamelled M.S. butt hinges with necessary screws :				
8.17.1	Panelled or panelled and glazed shutters				
8.17.1.1	Gamair Wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutters of a cupboard (half panelled and half glazed)				
	200×108 cm = 2.16 sqm.				
	Materials-				
	Gamair wood				
	Styles 4×2.00 m = 8.00 m+				
	Rails 3×1.105 m = 3.315 m				
	total = 11.315 m				
	Qty $11.315 \times 0.08 \times$				
	Panels - $2 \times 0.48 \times 0.41 \times$				
	$0.016 = 0.006$ cum.				
	Sash bars				
	$(2 \times 1.14 = 2.28) + (6 \times 0.48 = 2.88)$				
	=5.16 m				
	$5.16 \times 0.038 \times 0.025 = 0.005$ cum.				
	Beadings $16 \times 0.92 \times 0.014 \times$				
	$0.012 = 0.002$ cum.				
	Total = 0.036 cum				
	Add wastage @ 10% = 0.004 cum				
	Total = 0.040 cum				
	Say 40 cudm				
08283	Gamair Wood	10 cudm	40.00	₹ 350.00	₹ 1,400.00
0473	Carriage of timber	cum	0.04	₹ 80.65	₹ 3.23
08062	Iron hinges- $75 \times 47 \times 1.70$ mm	10 Nos	6.00	₹ 75.00	₹ 45.00

08067	Screws 30mm	100 Nos	48.00	₹ 50.00	₹ 24.00
08146	Glasses 10kg/sqm (4.0mm thick)	sqm	0.99	₹ 360.00	₹ 356.40
	Labour-				
0208	Carpenter (Average)	Day	2.40	₹ 400.00	₹ 960.00
0203	Beldar	Day	0.77	₹ 300.00	₹ 231.00
0217	Glazier	Day	0.18	₹ 380.00	₹ 68.40
	TOTAL				₹ 3,088.03
	Add 1 % for water charges				₹ 30.88
	TOTAL				₹ 3,118.91
	Add 3% for sundries & contingencies				₹ 93.57
	Total				₹ 3,212.48
	Add 15% for contractor's profit and overheads				₹ 481.87
	Cost of 2.16sqm.				₹ 3,694.35
	Cost of 1 sqm.				₹ 1,710.35
	Say				₹ 1,710.40
8.17	Providing and fixing 25 mm thick shutters for cupboards etc. including ISI marked black enamelled M.S. butt hinges with necessary screws :				
8.17.1	Glazed shutters				
8.17.1.2	Gamair Wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for shutter of a door (glazed)				
	200 × 108 cm = 2.16 sqm.				
	Materials :				
	(i) Gamair Wood				
	Styles : 4 × 200 × 9.5 × 2.5 cm = 0.019 cum+				
	Rails				
	Top & intermediate rails				
	2 × 110.5 × 9.5 × 2.5 cm = 0.006 cum+				
	Lock and bottom rails				
	2 × 110.5 × 19.7 × 2.5 cm = 0.011cum+				
	Beatings-				
	2 × 186.1 × 1.9 × 1.2 cm = 0.001cum+				
	4 × 171.70 × 1.9 × 1.2 cm = 0.002cum.				
	Total = 0.039 cum.+				
	Add for wastage @ 10% = 0.004 cum.				
	Grand Total = 0.043 cum.				
	Say 43 cudm				
08283	(i) Gamair Wood	10 cudm	43.00	₹ 350.00	₹ 1,505.00
08146	(ii) Glasses (10 kg/sqm) 4.0mm thick	sqm	1.27	₹ 360.00	₹ 457.20
08061	(iii) Black enamelled M.S. butt hinges 100 × 58 × 1.90 mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	Black enamelled M.S. butt hinges 50 × 37 × 1.50 mm	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80

08069	M.S. Screws 20mm	100 Nos	8.00	₹	35.00	₹	2.80
0473	(iv) Carriage of timber	cum	0.043	₹	80.65	₹	3.47
	Labour:						
0208	Carpenter (Avg.)	Day	1.83	₹	400.00	₹	732.00
0217	Glazier	Day	0.23	₹	380.00	₹	87.40
0203	Beldar	Day	0.77	₹	300.00	₹	231.00
	TOTAL					₹	3,122.67
	Add 1% for water charges					₹	31.23
	TOTAL					₹	3,153.90
	Add 3% for sundries & contingencies					₹	94.62
	Total					₹	3,248.52
	Add 15% for contractor's profit and overheads					₹	487.28
	Cost of 2.16 sqm.					₹	3,735.80
	Cost of 1 sqm.					₹	1,729.54
	Say					₹	1,729.50
8.18	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.						
8.18.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.						
Code	Description	Unit	Quantity		Rate		Amount
	Details of cost for 2.20 sqm.						
	Materials-						
08124	35mm thick door shutters	sqm	2.20	₹	1,700.00	₹	3,740.00
0473	Carriage of door	Cum	0.077	₹	80.65	₹	6.21
08248	Stainless steel butt hinges (heavy weight)	10 Nos	6.00	₹	270.00	₹	162.00
	100 × 60 × 2.5 mm IS : 12817 marked						
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹	215.00	₹	103.20
	Labour-						
	For fixing shutter and fittings						
0208	Carpenter (Average)	Day	0.55	₹	400.00	₹	220.00
0203	Beldar	Day	0.55	₹	300.00	₹	165.00
	TOTAL					₹	4,396.41
	Add 1% for water charges					₹	43.96
	TOTAL					₹	4,440.37
	Add 3% for sundries & contingencies					₹	133.21
	Total					₹	4,573.58
	Add 15% for contractor's profit and overheads					₹	686.04
	Cost for 2.2 sqm.					₹	5,259.62
	Cost of 1 sqm.					₹	2,390.74
	Say					₹	2,390.70
8.18	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.						
8.18.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.						
Code	Description	Unit	Quantity		Rate		Amount
	Details of cost for 2.2 sqm.						
	Materials-						

08125	30mm thick door shutters	sqm	2.20	₹ 1,600.00	₹ 3,520.00
0473	Carriage of door	Cum	0.066	₹ 80.65	₹ 5.32
08248	Stainless steel butt hinges (heavy weight)	10 Nos	6.00	₹ 270.00	₹ 162.00
	100×60×2.5 mm IS : 12817 marked				
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹ 215.00	₹ 103.20
	Labour-				
	For fixing shutter and fittings.				
0208	Carpenter (Average)	Day	0.55	₹ 400.00	₹ 220.00
0203	Beldar	Day	0.55	₹ 300.00	₹ 165.00
	TOTAL				₹ 4,175.52
	Add 1 % for water charges				₹ 41.76
	TOTAL				₹ 4,217.28
	Add 3% for sundries & contingencies				₹ 126.52
	Total				₹ 4,343.80
	Add 15% for contractor's profit and overheads				₹ 651.57
	Cost for 2.2 sqm.				₹ 4,995.37
	Cost of 1 sqm.				₹ 2,270.62
	Say				₹ 2,270.60
8.18	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
8.18.3	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S.Piano hinges IS : 3818 marked with necessary screws.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2.2 sqm.				
	Materials-				
08126	25mm thick door shutters	sqm	2.20	₹ 1,500.00	₹ 3,300.00
0473	Carriage of door	Cum	0.055	₹ 80.65	₹ 4.44
	Fittings-For a door 2.2×1.00m = 2.20 sqm.				
08064	Nickel plated bright finished M.S. Piano hinges	metre	4.40	₹ 50.00	₹ 220.00
08068	Screws 25mm	100 Nos	125.00	₹ 45.00	₹ 56.25
	Labour-				
	For fixing shutter and fittings.				
0208	Carpenter (Average)	Day	0.55	₹ 400.00	₹ 220.00
0203	Beldar	Day	0.55	₹ 300.00	₹ 165.00
	TOTAL				₹ 3,965.69
	Add 1% for water charges				₹ 39.66
	TOTAL				₹ 4,005.35
	Add 3% for sundries & contingencies				₹ 120.16
	Total				₹ 4,125.51
	Add 15% for contractor's profit and overheads				₹ 618.83
	Cost for 2.2 sqm.				₹ 4,744.34
	Cost of 1 sqm.				₹ 2,156.52
	Say				₹ 2,156.50
8.19	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				

8.19.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2.2 sqm.				
	Materials-				
08127	35mm thick door shutters	sqm	2.20	₹ 1,050.00	₹ 2,310.00
0473	Carriage of door	Cum	0.077	₹ 80.65	₹ 6.21
	Fittings-For a door 2.2×1.0m = 2.20 sqm.				
08248	Stainless steel butt hinges (heavy weight)	10 Nos	6.00	₹ 270.00	₹ 162.00
	100 × 60 × 2.5 mm IS : 12817 marked				
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹ 215.00	₹ 103.20
	Labour-				
	For fixing shutter and fittings.				
0208	Carpenter (Average)	Day	0.55	₹ 400.00	₹ 220.00
0203	Beldar	Day	0.55	₹ 300.00	₹ 165.00
	TOTAL				₹ 2,966.41
	Add 1 % for water charges				₹ 29.66
	TOTAL				₹ 2,996.07
	Add 3% for sundries & contingencies				₹ 89.88
	Total				₹ 3,085.95
	Add 15% for contractor's profit and overheads				₹ 462.89
	Cost for 2.2 sqm.				₹ 3,548.84
	Cost of 1 sqm.				₹ 1,613.11
	Say				₹ 1,613.10
8.19	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
8.19.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2.2 sqm.				
	Materials-				
08128	30mm thick door shutters	sqm	2.20	₹ 950.00	₹ 2,090.00
0473	Carriage of door	Cum	0.066	₹ 80.65	₹ 5.32
	Fittings-For a door 2.2×1.0m = 2.20 sqm.				
08248	Stainless steel butt hinges (heavy weight)	10 Nos	6.00	₹ 270.00	₹ 162.00
	100×60×2.5 mm IS : 12817 marked				
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹ 215.00	₹ 103.20
	Labour-				
	For fixing shutter and fittings.				
0208	Carpenter (Average)	Day	0.55	₹ 400.00	₹ 220.00
0203	Beldar	Day	0.55	₹ 300.00	₹ 165.00
	TOTAL				₹ 2,745.52
	Add 1 % for water charges				₹ 27.46
	TOTAL				₹ 2,772.98
	Add 3% for sundries & contingencies				₹ 83.19
	Total				₹ 2,856.17
	Add 15% for contractor's profit and overheads				₹ 428.43
	Cost for 2.2 sqm.				₹ 3,284.60

	Cost of 1 sqm.				₹	1,493.00
	Say				₹	1,493.00
8.19	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.					
8.19.3	25mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 2.2 sqm.					
	Materials-					
08129	25mm thick door shutters	sqm	2.20	₹ 880.00	₹	1,936.00
0473	Carriage of door	Cum	0.055	₹ 80.65	₹	4.44
	Fittings-For a door 2.2x1.0m = 2.20 sqm.					
08064	Nickel plated bright finished M.S. Piano hinges	metre	4.40	₹ 50.00	₹	220.00
08068	Screws 25mm	100 Nos	125.00	₹ 45.00	₹	56.25
	Labour-					
	For fixing shutter and fittings.					
0208	Carpenter (Average)	Day	0.55	₹ 400.00	₹	220.00
0203	Beldar	Day	0.55	₹ 300.00	₹	165.00
	TOTAL				₹	2,601.69
	Add 1% for water charges				₹	26.02
	TOTAL				₹	2,627.71
	Add 3% for sundries & contingencies				₹	78.83
	Total				₹	2,706.54
	Add 15% for contractor's profit and overheads				₹	405.98
	Cost for 2.2 sqm.				₹	3,112.52
	Cost of 1 sqm.				₹	1,414.78
	Say				₹	1,414.80
8.20	Extra for Providing and fixing flush doors with decorative veneering					
8.20.1	On one side in item no. 8.19					
	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 1 sqm.					
08200	Extra for providing teak veneering on one side instead of commercial veneering	sqm	1.00	₹ 375.00	₹	375.00
	TOTAL				₹	375.00
	Add 1% for water charges				₹	3.75
	TOTAL				₹	378.75
	Add 3% for sundries & contingencies				₹	11.36
	Total				₹	390.11
	Add 15% for contractor's profit and overheads				₹	58.52
	Cost for one sqm.				₹	448.63
	Say				₹	448.60
8.21	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of shutters (over all area of door shutter to be measured) Over item no. 8.18 and 8.19					
	Description	Unit	Quantity	Rate	Amount	

	Details of cost for 1 sqm. of door area				
08130	Door area	sqm of door area	1.00	₹ 324.00	₹ 324.00
	TOTAL				₹ 324.00
	Add 1 % for water charges				₹ 3.24
	TOTAL				₹ 327.24
	Add 3% for sundries & contingencies				₹ 9.82
	Total				₹ 337.06
	Add 15% for contractor's profit and overheads				₹ 50.56
	Cost for one sqm. of door area				₹ 387.62
	Say				₹ 387.60
8.22	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):				
8.22.1	Rectangular or square.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 sqm. of door area				
08131	Rectangular or square per panel door area	sqm of door area	1.00	₹ 135.00	₹ 135.00
	TOTAL				₹ 135.00
	Add 1 % for water charges				₹ 1.35
	TOTAL				₹ 136.35
	Add 3% for sundries & contingencies				₹ 4.09
	Total				₹ 140.44
	Add 15% for contractor's profit and overheads				₹ 21.07
	Cost for one sqm. of door area				₹ 161.51
	Say				₹ 161.50
8.22	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):				
8.22.2	Circular.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 sqm. of door area				
08132	Circular panel door area	sqm of door area	1.00	₹ 210.00	₹ 210.00
	TOTAL				₹ 210.00
	Add 1% for water charges				₹ 2.10
	TOTAL				₹ 212.10
	Add 3% for sundries & contingencies				₹ 6.36
	Total				₹ 218.46
	Add 15% for contractor's profit and overheads				₹ 32.77
	Cost for one sqm. of door area				₹ 251.23
	Say				₹ 251.20
8.23	Extra if louvers (not exceeding 0.2 sqm) are provided in flush door shutters (overall area of door shutters to be measured).				
8.23.1	Decorative type door.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 sqm. of door area				
08133	Decorative type door	sqm of door area	1.00	₹ 335.00	₹ 335.00
	TOTAL				₹ 335.00
	Add 1 % for water charges				₹ 3.35
	TOTAL				₹ 338.35
	Add 3% for sundries & contingencies				₹ 10.15
	Total				₹ 348.50
	Add 15% for contractor's profit and overheads				₹ 52.28
	Cost for one sqm. of door area				₹ 400.78
	Say				₹ 400.80
8.24	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 sqm. of door area				
08134	Door area	sqm of door area	1.00	₹ 98.00	₹ 98.00
	TOTAL				₹ 98.00
	Add 1% for water charges				₹ 0.98
	TOTAL				₹ 98.98
	Add 3% for sundries & contingencies				₹ 2.97
	Total				₹ 101.95
	Add 15% for contractor's profit and overheads				₹ 15.29
	Cost for one sqm. of door area				₹ 117.24
	Say				₹ 117.20
8.25	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4 mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or/and black enamelled M.S. butt hinges with necessary screws.				
8.25.1	Gamair Wood				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for door shutters				
	2.00 × 1.08m = 2.16 sqm.				
	Materials -				
	Gamair Wood				
	Styles 4 × 200 × 9.5 × 3.5 cm = 0.0266 cum+				
	Top Rail - 1 × 110.5 × 9.5 × 3.5 cm = 0.0036 cum+				
	Lock and bottom rail				
	2 × 110.5 × 19.7 × 3.5 cm = 0.0152 cum.+				
	Beadings - (2 × 312 + 2 × 150) × (1.2) × (1.2) cm = 0.001 cum				
	Total = 0.0464 cum.				
	Add for wastage @ 10% = 0.005 cum.				
	Total = 0.0514 cum.				

	Say				
08283	Gamair Wood	10 cudm	51.40	₹ 350.00	₹ 1,799.00
	Wire gauge $2 \times 160 \times 40 \text{ cm} = 1.28 \text{ sqm.} +$				
	Add wastage @ 10% = 0.13 sqm.				
	Total = 1.41 sqm.				
08173	Wire gauge	sqm	1.41	₹ 275.00	₹ 387.75
08061	M.S. butt hinges $100 \times 58 \times 1.90 \text{ mm}$	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	M.S. butt hinges $50 \times 37 \times 1.50 \text{ mm}$	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. screws 40 mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. screws 20 mm	100 Nos	8.00	₹ 35.00	₹ 2.80
0473	Carriage of timber	cum	0.0514	₹ 80.65	₹ 4.15
	Labour-				
0209	Carpenter 1st class	Day	1.30	₹ 425.00	₹ 552.50
0210	Carpenter 2nd class	Day	0.90	₹ 380.00	₹ 342.00
0203	Beldar	Day	1.05	₹ 300.00	₹ 315.00
0225	Mistry	Day	0.105	₹ 380.00	₹ 39.90
	TOTAL				₹ 3,546.90
	Add 1 % for water charges				₹ 35.47
	TOTAL				₹ 3,582.37
	Add 3% for sundries & contingencies				₹ 107.47
	Total				₹ 3,689.84
	Add 15% for contractor's profit and overheads				₹ 553.48
	Cost of 2.16 sqm.				₹ 4,243.32
	Cost of 1 sqm.				₹ 1,964.50
	Say				₹ 1,964.50
8.25	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or/and black enamelled M.S. butt hinges with necessary screws.				
8.25.2	Local Teak Wood- scantling				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for door shutters				
	$2.00 \times 1.08\text{m} = 2.16 \text{ sqm.}$				
	Materials -				
	Local Teak Wood- scantling				
	Styles $4 \times 200 \times 9.5 \times 3.5 \text{ cm} = 0.0266 \text{ cum} +$				
	Top Rail - $1 \times 110.5 \times 9.5 \times 3.5 \text{ cm} = 0.0036 \text{ cum} +$				
	Lock and bottom rail				
	$2 \times 110.5 \times 19.7 \times 3.5 \text{ cm} = 0.0152 \text{ cum.} +$				
	Beadings - $(2 \times 312 + 2 \times 150) \times (1.2) \times (1.2) \text{ cm}$				
	=				
	0.001 cum.				
	Total =				
	0.0464 cum. +				
	Add for wastage @ 10% =				
	0.005 cum.				

	Total = 0.0514 cum.				
	Say				
08280	Local Teak Wood- scantling	10 cudm	51.40	₹ 257.00	₹ 1,320.98
0473	Carriage of timber	cum	0.0514	₹ 80.65	₹ 4.15
	Wire gauge $2 \times 160 \times 40$ cm = 1.28 sqm.+				
	Add wastage @ 10% = 0.13 sqm.				
	Total = 1.41 sqm.				
08173	Wire gauge	sqm	1.41	₹ 275.00	₹ 387.75
08061	M.S. butt hinges $100 \times 58 \times 1.90$ mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	M.S. butt hinges $50 \times 37 \times 1.50$ mm	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. screws 40 mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. screws 20 mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour-				
0209	Carpenter 1st class	Day	1.30	₹ 425.00	₹ 552.50
0210	Carpenter 2nd class	Day	0.90	₹ 380.00	₹ 342.00
0203	Beldar	Day	1.05	₹ 300.00	₹ 315.00
0225	Mistry	Day	0.105	₹ 380.00	₹ 39.90
	TOTAL				₹ 3,068.88
	Add 1 % for water charges				₹ 30.69
	TOTAL				₹ 3,099.57
	Add 3% for sundries & contingencies				₹ 92.99
	Total				₹ 3,192.56
	Add 15% for contractor's profit and overheads				₹ 478.88
	Cost of 2.16 sqm.				₹ 3,671.44
	Cost of 1 sqm.				₹ 1,699.74
	Say				₹ 1,699.70
8.26	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked stainless steel butt hinges with necessary screws.				
8.26.1	Gamair Wood				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for door shutters				
	$2.00 \times 1.08\text{m} = 2.16$ sqm.				
	Materials -				
	Gamair Wood				
	Styles $4 \times 200 \times 9.5 \times 3.5$ cm = 0.0266 cum+				
	Top Rail - $1 \times 110.5 \times 9.5 \times 3.5$ cm = 0.0036 cum+				
	Lock and bottom rail				
	$2 \times 110.5 \times 19.7 \times 3.5$ cm = 0.0152 cum.+				
	Beadings - $(2 \times 312 + 2 \times 150) \times (1.2) \times (1.2)$ cm				
	= 0.001 cum.				
	Total = 0.0464 cum.+				

	Add for wastage @ 10% 0.005 cum.	=				
	Total 0.0514 cum.	=				
	Say					
08283	Gamair Wood	10 cudm	51.40	₹	350.00	₹ 1,799.00
	Wire gauge $2 \times 160 \times 40$ cm = 1.28 sqm.+					
	Add wastage @ 10% = 0.13 sqm.					
	Total sqm. = 1.41					
08173	Wire gauge	sqm	1.41	₹	275.00	₹ 387.75
08248	Stainless Steel butt hinges (heavy weight) $100 \times 60 \times 2.5$ mm IS : 12817 marked	10 Nos	6.00	₹	270.00	₹ 162.00
08246	Stainless Steel butt hinges (heavy weight) $50 \times 37 \times 1.5$ mm IS : 12817 marked	10 Nos	2.00	₹	150.00	₹ 30.00
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹	215.00	₹ 103.20
08242	Stainless steel screws 20 mm	100 Nos	8.00	₹	120.00	₹ 9.60
0473	Carriage of timber	cum	0.0514	₹	80.65	₹ 4.15
	Labour-					
0209	Carpenter 1st class	Day	1.30	₹	425.00	₹ 552.50
0210	Carpenter 2nd class	Day	0.90	₹	380.00	₹ 342.00
0203	Beldar	Day	1.05	₹	300.00	₹ 315.00
0225	Mistry	Day	0.105	₹	380.00	₹ 39.90
	TOTAL					₹ 3,745.10
	Add 1 % for water charges					₹ 37.45
	TOTAL					₹ 3,782.55
	Add 3% for sundries & contingencies					₹ 113.48
	Total					₹ 3,896.03
	Add 15% for contractor's profit and overheads					₹ 584.40
	Cost of 2.16 sqm.					₹ 4,480.43
	Cost of 1 sqm.					₹ 2,074.27
	Say					₹ 2,074.30
8.26	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked stainless steel butt hinges with necessary screws					
8.26.2	Local Teak Wood- scantling					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for door shutters					
	2.00×1.08 m = 2.16 sqm.					
	Materials -					
	Local Teak Wood- scantling					
	Styles $4 \times 200 \times 9.5 \times 3.5$ cm = 0.0266 cum+					
	Top Rail - $1 \times 110.5 \times 9.5 \times 3.5$ cm = 0.0036 cum+					
	Lock and bottom rail					

	$2 \times 110.5 \times 19.7 \times 3.5 \text{ cm} =$ 0.0152 cum.+				
	Beadings - $(2 \times 312 + 2 \times 150) \times (1.2) \times (1.2) \text{ cm}$				
	= 0.001 cum.				
	Total 0.0464 cum.+				
	Add for wastage @ 10% 0.005 cum.				
	Total 0.0514 cum.				
	Say 51.4 cudm.				
08280	Local Teak Wood- scantling	10 cudm	51.40	₹ 257.00	₹ 1,320.98
	Wire gauge $2 \times 160 \times 40 \text{ cm} = 1.28$ sqm.+				
	Add wastage @ 10% = 0.13 sqm.				
	Total = 1.41 sqm.				
08173	Wire gauge	sqm	1.41	₹ 275.00	₹ 387.75
08248	Stainless Steel butt hinges (heavy weight) $100 \times 60 \times 2.5 \text{ mm IS : 12817 marked}$	10 Nos	6.00	₹ 270.00	₹ 162.00
08246	Stainless Steel butt hinges (heavy weight) $50 \times 37 \times 1.5 \text{ mm IS : 12817 marked}$	10 Nos	2.00	₹ 150.00	₹ 30.00
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹ 215.00	₹ 103.20
08242	Stainless steel screws 20 mm	100 Nos	8.00	₹ 120.00	₹ 9.60
0473	Carriage of timber	cum	0.0514	₹ 80.65	₹ 4.15
	Labour-				
0209	Carpenter 1st class	Day	1.30	₹ 425.00	₹ 552.50
0210	Carpenter 2nd class	Day	0.90	₹ 380.00	₹ 342.00
0203	Beldar	Day	1.05	₹ 300.00	₹ 315.00
0225	Mistry	Day	0.105	₹ 380.00	₹ 39.90
	TOTAL				₹ 3,267.08
	Add 1 % for water charges				₹ 32.67
	TOTAL				₹ 3,299.75
	Add 3% for sundries & contingencies				₹ 98.99
	Total				₹ 3,398.74
	Add 15% for contractor's profit and overheads				₹ 509.81
	Cost of 2.16 sqm.				₹ 3,908.55
	Cost of 1 sqm.				₹ 1,809.51
	Say				₹ 1,809.50
8.27	Providing and fixing 30mm thick wire gauge shutters using galvanised M.S. wire gauge of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked Stainless Steel butt hinges with necessary screws.				
8.27.1	Gamair Wood				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for door shutters				
	$2.00 \times 1.08 \text{ m} = 2.16 \text{ sqm.}$				

	Materials -				
	Gamair Wood				
	Styles $4 \times 200 \times 9.5 \times 3.0 \text{ cm} =$ 0.0230 cum+				
	Top Rail - $1 \times 110.5 \times 9.5 \times 3.0 \text{ cm} =$ 0.0030 cum+				
	Lock and bottom rail				
	$2 \times 110.5 \times 19.7 \times 3.0 \text{ cm} =$ 0.0130 cum.+				
	Beadings - $(2 \times 312 + 2 \times$ $150) \times (1.2) \times (1.2) \text{ cm}$				
	=				
	0.001 cum.				
	Total =				
	0.040 cum.+				
	Add for wastage @ 10% =				
	0.004 cum.				
	Total =				
	0.044 cum.				
	Say				
	44 cudm.				
08283	Gamair Wood	10 cudm	44.00	₹ 350.00	₹ 1,540.00
0473	Carriage of timber	cum	0.044	₹ 80.65	₹ 3.55
	Wire gauge $2 \times 160 \times 40 \text{ cm} = 1.28$ sqm.+				
	Add wastage @ 10% = 0.13 sqm.				
	Total = 1.41 sqm.				
08173	Wire gauge	sqm	1.41	₹ 275.00	₹ 387.75
08249	Stainless steel butt hinges (heavy weight)	10 Nos	6.00	₹ 230.00	₹ 138.00
	$75 \times 50 \times 2.5 \text{ mm}$ IS : 12817 marked				
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹ 215.00	₹ 103.20
	Labour-				
0209	Carpenter 1st class	Day	1.20	₹ 425.00	₹ 510.00
0210	Carpenter 2nd class	Day	0.80	₹ 380.00	₹ 304.00
0203	Beldar	Day	0.95	₹ 300.00	₹ 285.00
0225	Mistry	Day	0.08	₹ 380.00	₹ 30.40
	TOTAL				₹ 3,301.90
	Add 1% for water charges				₹ 33.02
	TOTAL				₹ 3,334.92
	Add 3% for sundries & contingencies				₹ 100.05
	Total				₹ 3,434.97
	Add 15% for contractor's profit and overheads				₹ 515.25
	Cost of 2.16 sqm.				₹ 3,950.22
	Cost of 1 sqm.				₹ 1,828.81
	Say				₹ 1,828.80
8.27	Providing and fixing 30mm thick wire gauge shutters using galvanised M.S. wire gauge of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked Stainless Steel butt hinges with necessary screws.				
8.27.2	Local Teak Wood- scantling				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for door shutters				

	2.00 × 1.08 m = 2.16 sqm.				
	Materials -				
	Local Teak Wood- scantling				
	Styles 4 × 200 × 9.5 × 3.0 cm = 0.0230 cum+				
	Top Rail - 1 × 110.5 × 9.5 × 3.0 cm = 0.0030 cum+				
	Lock and bottom rail				
	2 × 110.5 × 19.7 × 3.0 cm = 0.0130 cum.+				
	Beadings - (2 × 312 + 2 × 150) × (1.2) × (1.2) cm				
	=				
	0.001 cum.				
	Total =				
	0.040 cum.+				
	Add for wastage @ 10% =				
	0.004 cum.				
	Total =				
	0.044 cum.				
	Say				
	44 cudm.				
08280	Local Teak Wood- scantling	10 cudm	44.00	₹ 257.00	₹ 1,130.80
0473	Carriage of timber	cum	0.044	₹ 80.65	₹ 3.55
	Wire gauge 2 × 160 × 40 cm = 1.28 sqm.+				
	Add wastage @ 10% = 0.13 sqm.				
	Total = 1.41 sqm.				
08173	Wire gauge	sqm	1.41	₹ 275.00	₹ 387.75
08249	Stainless steel butt hinges (heavy weight)	10 Nos	6.00	₹ 230.00	₹ 138.00
	75 × 50 × 2.5 mm IS : 12817 marked				
08240	Stainless steel screws 40 mm	100 Nos	48.00	₹ 215.00	₹ 103.20
	Labour-				
0209	Carpenter 1st class	Day	1.20	₹ 425.00	₹ 510.00
0210	Carpenter 2nd class	Day	0.80	₹ 380.00	₹ 304.00
0203	Beldar	Day	0.95	₹ 300.00	₹ 285.00
0225	Mistry	Day	0.08	₹ 380.00	₹ 30.40
	TOTAL				₹ 2,892.70
	Add 1% for water charges				₹ 28.93
	TOTAL				₹ 2,921.63
	Add 3% for sundries & contingencies				₹ 87.65
	Total				₹ 3,009.28
	Add 15% for contractor's profit and overheads				₹ 451.39
	Cost of 2.16 sqm.				₹ 3,460.67
	Cost of 1 sqm.				₹ 1,602.16
	Say				₹ 1,602.20
8.28	Providing and fixing 30mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or /and black enamelled M.S. butt hinges with necessary screws.				
8.28.1	Gamair Wood				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for door shutters				

	2.00 × 1.08 m = 2.16 sqm.				
	Materials -				
	Gamair Wood				
	Styles 4 × 200 × 9.5 × 3.0 cm = 0.0230 cum+				
	Top Rail - 1 × 110.5 × 9.5 × 3.0 cm = 0.0030 cum+				
	Lock and bottom rail				
	2 × 110.5 × 19.7 × 3.0 cm = 0.0130 cum. +				
	Beadings - (2 × 312 + 2 × 150) × (1.2) × (1.2) cm				
	=				
	0.001 cum.				
	Total =				
	0.040 cum. +				
	Add for wastage @ 10% =				
	0.004 cum.				
	Total =				
	0.044 cum.				
	Say				
	44 cudm.				
08283	Gamair Wood	10 cudm	44.00	₹ 350.00	₹ 1,540.00
0473	Carriage of timber	cum	0.044	₹ 80.65	₹ 3.55
	Wire gauge 2 × 160 × 40 cm = 1.28 sqm. +				
	Add wastage @ 10% = 0.13 sqm.				
	Total = 1.41 sqm.				
08173	Wire gauge	sqm	1.41	₹ 275.00	₹ 387.75
08061	Iron butt hinges 100×58×1.90 mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	Iron butt hinges 50×37×1.50 mm	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. screws 40 mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. screws 20 mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour-				
0209	Carpenter 1st class	Day	1.20	₹ 425.00	₹ 510.00
0210	Carpenter 2nd class	Day	0.80	₹ 380.00	₹ 304.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0225	Mistry	Day	0.10	₹ 380.00	₹ 38.00
	TOTAL				₹ 3,189.90
	Add 1% for water charges				₹ 31.90
	TOTAL				₹ 3,221.80
	Add 3% for sundries & contingencies				₹ 96.65
	Total				₹ 3,318.45
	Add 15% for contractor's profit and overheads				₹ 497.77
	Cost of 2.16 sqm.				₹ 3,816.22
	Cost of 1 sqm.				₹ 1,766.77
	Say				₹ 1,766.80
8.28	Providing and fixing 30mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or/and black enamelled M.S. butt hinges with necessary screws.				
8.28.2	Local Teak Wood- scantling				

Code	Description	Unit	Quantity	Amount	Rate
	Details of cost for door shutters				
	2.00 × 1.08 m = 2.16 sqm.				
	Materials -				
	Local Teak Wood- scantling				
	Styles 4 × 200 × 9.5 × 3.0 cm = 0.0230 cum+				
	Top Rail - 1 × 110.5 × 9.5 × 3.0 cm = 0.0030 cum+				
	Lock and bottom rail				
	2 × 110.5 × 19.7 × 3.0 cm = 0.0130 cum.+				
	Beadings - (2 × 312 + 2 × 150) × (1.2) × (1.2) cm				
	= 0.001 cum.				
	Total = 0.040 cum.+				
	Add for wastage @ 10% = 0.004 cum.				
	Total = 0.044 cum.				
	Say 44 cudm.				
08280	Local Teak Wood- scantling	10 cudm	44.00	₹ 257.00	₹ 1,130.80
0473	Carriage of timber	cum	0.044	₹ 80.65	₹ 3.55
	Wire gauge 2 × 160 × 40 cm = 1.28 sqm.+				
	Add wastage @ 10% = 0.13 sqm.				
	Total = 1.41 sqm.				
08173	Wire gauge	sqm	1.41	₹ 275.00	₹ 387.75
08061	Iron butt hinges 100×58×1.90 mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	Iron butt hinges 50×37×1.50 mm	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. screws 40 mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. screws 20 mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour-				
0209	Carpenter 1st class	Day	1.20	₹ 425.00	₹ 510.00
0210	Carpenter 2nd class	Day	0.80	₹ 380.00	₹ 304.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0225	Mistry	Day	0.10	₹ 380.00	₹ 38.00
	TOTAL				₹ 2,780.70
	Add 1% for water charges				₹ 27.81
	TOTAL				₹ 2,808.51
	Add 3% for sundries & contingencies				₹ 84.26
	Total				₹ 2,892.77
	Add 15% for contractor's profit and overheads				₹ 433.92
	Cost of 2.16 sqm.				₹ 3,326.69
	Cost of 1 sqm.				₹ 1,540.13
	Say				₹ 1,540.10

8.29	Providing and fixing wire gauze laminated veneer lumber shutters conforming to IS : 14616, and as per TADS 15 :2001 (Part B) using galvanised wire gauze with average width of aperture 1.4mm in both directions with wire of dia 0.63mm as per IS : 1568 for doors, windows and clerestory windows including ISI marked bright finished or/and black enamelled M.S. butt hinges with necessary screws as per directions of Engineer-in-charge.				
8.29.1	35 mm thick shutters				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of one shutter				
	220 × 108 cm = 2.38 sqm.				
	Materials:				
08193	Factory made shutters LVL syles, rails and panels of galvanised wire gauge	sqm	2.38	₹ 1,700.00	₹ 4,046.00
0473	Carriage of shutters	Cum	0.0833	₹ 80.65	₹ 6.72
	Fittings :				
08061	Black enamelled M.S. Butt hinges- 100 × 58 × 1.9 mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	Black enamelled M.S. Butt hinges- 50 × 37 × 1.5 mm	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour:				
0208	Carpenter Average	Day	0.52	₹ 400.00	₹ 208.00
0203	Beldar	Day	0.60	₹ 300.00	₹ 180.00
	TOTAL				₹ 4,547.32
	Add 1 % for water charges				₹ 45.47
	TOTAL				₹ 4,592.79
	Add 3% for sundries & contingencies				₹ 137.78
	Total				₹ 4,730.57
	Add 15% for contractor's profit and overheads				₹ 709.59
	Cost of 2.38 sqm.				₹ 5,440.16
	Cost of 1 sqm.				₹ 2,285.78
	Say				₹ 2,285.80
8.29	Providing and fixing wire gauze laminated veneer lumber shutters conforming to IS : 14616, and as per TADS 15 :2001 (Part B) using galvanised wire gauze with average width of aperture 1.4mm in both directions with wire of dia 0.63mm as per IS : 1568 for doors, windows and clerestory windows including ISI marked bright finished or/and black enamelled M.S. butt hinges with necessary screws as per directions of Engineer-in-charge.				
8.29.2	30 mm thick shutters				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of one shutter				
	220 × 108 cm = 2.38 sqm.				
	Materials:				
08194	Factory made shutters LVL syles, rails and panels of galvanised wire gauge	sqm	2.38	₹ 1,500.00	₹ 3,570.00
0473	Carriage of shutters	Cum	0.0714	₹ 80.65	₹ 5.76
	Fittings:				
08061	Black enamelled M.S. Butt hinges-100 × 58 × 1.9 mm	10 Nos	6.00	₹ 100.00	₹ 60.00
08063	Black enamelled M.S. Butt hinges- 50×37×1.5 mm	10 Nos	2.00	₹ 75.00	₹ 15.00
08066	M.S. Screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80

08069	M.S. Screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour:				
0208	Carpenter Average	Day	0.52	₹ 400.00	₹ 208.00
0203	Beldar	Day	0.60	₹ 300.00	₹ 180.00
	TOTAL				₹ 4,070.36
	Add 1% for water charges				₹ 40.70
	TOTAL				₹ 4,111.06
	Add 3% for sundries & contingencies				₹ 123.33
	Total				₹ 4,234.39
	Add 15% for contractor's profit and overheads				₹ 635.16
	Cost of 2.38 sqm.				₹ 4,869.55
	Cost of 1 sqm.				₹ 2,046.03
Say					₹ 2,046.00
8.30	Providing 50 × 50 × 50 mm Gamair wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand) and making good the walls etc.				
Code	Description	Unit	Quantity	Rate	
	Details of cost for 100 Nos.				
	Materials:				
	Gamair Wood 100 × (50 × 50 × 50) mm = 0.125 cum.				
	Add wastage @ 10% = 0.0013 cum.				
	Total = 0.0138 cum.				
	Say 14 cudm.				
08283	Gamair Wood	10 cudm	14.00	₹ 350.00	₹ 490.00
0473	Carriage of timber	cum	0.014	₹ 80.65	₹ 1.13
	Cement mortar 1:3 (1 cement: 3 fine sand) (Rate as per item No. 3.1.3)	cum	0.002	₹ 3,992.09	₹ 7.98
	Labour:				
0210	Carpenter 2nd class	Day	0.75	₹ 380.00	₹ 285.00
0220	Mason 2nd class	Day	0.75	₹ 380.00	₹ 285.00
0203	Beldar	Day	0.75	₹ 300.00	₹ 225.00
	TOTAL				₹ 1,294.11
	Add 1 % for water charges				₹ 12.94
	TOTAL				₹ 1,307.05
	Add 3% for sundries & contingencies				₹ 39.21
	Total				₹ 1,346.26
	Add 15% for contractor's profit and overheads				₹ 201.94
	Cost of 100 nos.				₹ 1,548.20
	Cost of 1 no.				₹ 15.48
Say					₹ 15.50
8.31	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work/CC/R.C.C. and making good etc. complete.				
8.31.1	25 mm long				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of 10 nos.				
	Materials:				

08201	Expandable fastner 25 mm long with plastic sleeve and M.S. screws	each	10.00	₹ 12.00	₹ 120.00
0208	Carpenter (average)	Day	0.15	₹ 400.00	₹ 60.00
	TOTAL				₹ 180.00
	Add 1 % for water charges				₹ 1.80
	TOTAL				₹ 181.80
	Add 3% for sundries & contingencies				₹ 5.45
	Total				₹ 187.25
	Add 15% for contractor's profit and overheads				₹ 28.09
	Cost of 10 nos.				₹ 215.34
	Cost of 1 no.				₹ 21.53
	Say				₹ 21.50
8.31	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work /CC/R.C.C. and making good etc. complete.				
8.31.2	32 mm long				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of 10 nos.				
	Materials:				
08202	Expandable fastner 32 mm long with plastic sleeve and M.S. screws	each	10.00	₹ 14.00	₹ 140.00
0208	Carpenter (average)	Day	0.18	₹ 400.00	₹ 72.00
	TOTAL				₹ 212.00
	Add 1 % for water charges				₹ 2.12
	TOTAL				₹ 214.12
	Add 3% for sundries & contingencies				₹ 6.42
	Total				₹ 220.54
	Add 15% for contractor's profit and overheads				₹ 33.08
	Cost of 10 nos.				₹ 253.62
	Cost of 1 no.				₹ 25.36
	Say				₹ 25.40
8.31	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work /CC/R.C.C. and				
8.31.3	40 mm long				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of 10 nos.				
	Materials:				
08203	Expandable fastner 40 mm long with plastic sleeve and M.S. screws	each	10.00	₹ 16.00	₹ 160.00
0208	Carpenter (average)	Day	0.18	₹ 400.00	₹ 72.00
	TOTAL				₹ 232.00
	Add 1 % for water charges				₹ 2.32
	TOTAL				₹ 234.32
	Add 3% for sundries & contingencies				₹ 7.03
	Total				₹ 241.35
	Add 15% for contractor's profit and overheads				₹ 36.20
	Cost of 10 nos.				₹ 277.55
	Cost of 1 no.				₹ 27.76
	Say				₹ 27.80

8.31	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work /CC/R.C.C. and				
8.31.4	50 mm long				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of 10 nos.				
	Materials:				
08204	Expandable fastner 50 mm long with plastic sleeve and M.S. screws	each	10.00	₹ 20.00	₹ 200.00
0208	Carpenter (average)	Day	0.18	₹ 400.00	₹ 72.00
	TOTAL				₹ 272.00
	Add 1 % for water charges				₹ 2.72
	TOTAL				₹ 274.72
	Add 3% for sundries & contingencies				₹ 8.24
	Total				₹ 282.96
	Add 15% for contractor's profit and overheads				₹ 42.44
	Cost of 10 nos.				₹ 325.40
	Cost of 1 no.				₹ 32.54
	Say				₹ 32.50
8.32	Providing and fixing Gamair Wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface.				
8.32.1	40 mm thick.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 sqm.				
	Materials:				
	Gamair wood 10 × 0.04 m = 0.40 cum+				
	Add wastage @ 10% = 0.04 cum.				
	= 0.44 cum.				
	Say 440 cudm.				
08283	Gamair Wood	10 cudm	440.00	₹ 350.00	₹ 15,400.00
08285	Extra for selected planks of Gamair wood	10 cudm	440.00	₹ 50.00	₹ 2,200.00
	Gamair wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand)				
	(A) (Rate as per item no 8.30 of SH: 8)	each	55.00	₹ 15.50	₹ 852.50
	(B) Priming coat (Rate as per item no 12.31.1)	sqm	10.00	₹ 31.90	₹ 319.00
0473	Carriage of timber	cum	0.44	₹ 80.65	₹ 35.49
	Labour:				
	For planning and fixing				
0209	Carpenter 1st class	Day	2.15	₹ 425.00	₹ 913.75
0203	Beldar	Day	1.62	₹ 300.00	₹ 486.00
	TOTAL				₹ 20,206.74
	Add for water charges @ 1 % except (B+A)				₹ 190.35
	TOTAL				₹ 20,397.09

	Add 3% for sundries & contingencies except (B+A)				₹	576.77
	Total				₹	20,973.86
	Add 15% for contractor's profit and overheads except (B+A)				₹	2,970.35
	Cost of 10 sqm.				₹	23,944.21
	Cost of 1 sqm.				₹	2,394.42
	Say				₹	2,394.40
8.32	Providing and fixing Gamair wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface.					
8.32.2	25 mm thick.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 sqm.					
	Materials:					
	Gamair Wood 10 × 0.025 = 0.25 cum+					
	Add wastage @ 10% = 0.025 cum.					
	= 0.275 cum.					
	Say 275 cudm.					
08283	Gamair Wood	10 cudm	275.00	₹ 350.00	₹	9,625.00
08285	Extra for selected planks of Gamair wood	10 cudm	275.00	₹ 50.00	₹	1,375.00
0473	Carriage of timber	cum	0.275	₹ 80.65	₹	22.18
	Gamair wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand)					
	(A) (Rate as per item no 8.30 of SH: 8)	each	55.00	₹ 15.50	₹	852.50
	(B) Priming coat (Rate as per item no 12.31.1)	sqm	10.00	₹ 31.90	₹	319.00
	Labour:					
0209	Carpenter 1 st class	Day	2.15	₹ 425.00	₹	913.75
0203	Beldar	Day	1.62	₹ 300.00	₹	486.00
	TOTAL				₹	13,593.43
	Add for water charges @ 1 % except (B+A)				₹	124.22
	TOTAL				₹	13,717.65
	Add 3% for sundries & contingencies except (B+A)				₹	376.38
	Total				₹	14,094.03
	Add 15% for contractor's profit and overheads except (B+A)				₹	1,938.38
	Cost of 10 sqm.				₹	16,032.41
	Cost of 1 sqm.				₹	1,603.24
	Say				₹	1,603.20
8.32	Providing and fixing Gamair wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface.					
8.32.3	20 mm thick					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 sqm.					
	Materials:					

	Gamair wood 10×0.02 m = 0.20 cum.+				
	Add wastage @ 10% = 0.02 cum.				
	= 0.22 cum.				
	Say 220 cudm.				
08283	Gamair Wood	10 cudm	220.00	₹ 350.00	₹ 7,700.00
08285	Extra for selected planks of Gamair wood	10 cudm	220.00	₹ 50.00	₹ 1,100.00
0473	Carriage of timber	cum	0.22	₹ 80.65	₹ 17.74
	Gamair wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand)				
	(A) (Rate as per item no 8.30 of SH: 8)	each	55.00	₹ 15.50	₹ 852.50
	(B) Priming coat (Rate as per item no 12.31.1)	sqm	10.00	₹ 31.90	₹ 319.00
	Labour:				
0209	Carpenter 1 st class	Day	1.08	₹ 425.00	₹ 459.00
0210	Carpenter 2nd class	Day	0.80	₹ 380.00	₹ 304.00
0203	Beldar	Day	1.08	₹ 300.00	₹ 77.00
	TOTAL				₹ 10,829.24
	Add for water charges @ 1 % except (A+B)				₹ 96.58
	TOTAL				₹ 10,925.82
	Add 3% for sundries & contingencies except (B+A)				₹ 292.63
	Total				₹ 11,218.45
	Add 15% for contractor's profit and overheads except (B+A)				₹ 1,507.04
	Cost of 10 sqm.				₹ 12,725.49
	Cost of 1 sqm.				₹ 1,272.55
	Say				₹ 1,272.60
8.32	Providing and fixing Gamair wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface.				
8.32.4	12 mm thick				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 sqm.				
	Gamair wood 10×0.012 m = 0.12 cum+				
	Add wastage @ 10% = 0.012 cum.				
	= 0.132 cum.				
	Say 132 cudm.				
08283	Gamair Wood	10 cudm	132.00	₹ 350.00	₹ 4,620.00
08285	Extra for selected planks of Gamair wood	10 cudm	132.00	₹ 50.00	₹ 660.00
0473	Carriage of timber	cum	0.132	₹ 80.65	₹ 10.65
	Gamair wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand)				

	(A) (Rate as per item no 8.30 of SH: 8)	each	55.00	₹	15.50	₹	852.50
	(B) Priming coat (Rate as per item no 12.31.1)	sqm	10.00	₹	31.90	₹	319.00
	Labour:						
0209	Carpenter 1 st class	Day	1.08	₹	425.00	₹	459.00
0210	Carpenter 2nd class	Day	0.80	₹	380.00	₹	304.00
0203	Beldar	Day	1.08	₹	300.00	₹	324.00
	TOTAL					₹	7,549.15
	Add for water charges @ 1 % except (A+B)					₹	63.78
	TOTAL					₹	7,612.93
	Add 3% for sundries & contingencies except (A+B)					₹	193.24
	Total					₹	7,806.17
	Add 15% for contractor's profit and overheads except (A+B)					₹	995.20
	Cost of 10 sqm.					₹	8,801.37
	Cost of 1 sqm.					₹	880.14
	Say					₹	880.10
8.33	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood prelaminate one side decorative lamination on other side balancing lamination Grade I, Type II, IS : 12823 marked including priming coat on unexposed surface, with necessary fixing arrangement and screws etc. complete.						
8.33.1	12 mm thick						
Code	Description	Unit	Quantity	Rate		Rate	
	Details of cost for 10 sqm.						
	Materials-						
	Particle board (three layer medium density)						
	12mm thick = 10 sqm.+						
	Add wastage @ 10% = 1 sqm.						
	Total = 11 sqm.						
08215	Particle board (three layer medium density)	sqm	11.00	₹	785.00	₹	8,635.00
0473	Carriage of particle board	Cum	0.132	₹	80.65	₹	10.65
	Priming coat						
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	10.00	₹	31.90	₹	319.00
	Labour:						
0210	Carpenter 2nd class	Day	1.28	₹	380.00	₹	486.40
0203	Beldar	Day	1.43	₹	300.00	₹	429.00
05050	Rawl plug 50 mm (designation 10 no)	each	55.00	₹	7.00	₹	385.00
	TOTAL					₹	10,265.05
	Add for water charges @ 1% on all except on (A)					₹	99.46
	TOTAL					₹	10,364.51
	Add 3% for sundries & contingencies except (A)					₹	301.37
	Total					₹	10,665.88
	Add 15% for contractor's profit and overheads except (A)					₹	1,552.03
	Cost of 10 sqm.					₹	12,217.91
	Cost of 1 sqm.					₹	1,221.79
	Say					₹	1,221.80

8.33	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood prelaminate one side decorative lamination on other side balancing lamination Grade I, Type II, IS : 12823 marked including priming coat on unexposed surface, with necessary fixing arrangement and screws etc. complete.				
8.33.2	18 mm thick				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 sqm.				
	Materials-				
	Particle board (three layer medium density)				
	18mm thick = 10 sqm.+				
	Add wastage @ 10% = 1 sqm.				
	Toatal = 11 sqm.				
08216	Particle board (three layer medium density)	sqm	11.00	₹ 890.00	₹ 9,790.00
0473	Carriage of particle board	Cum	0.198	₹ 80.65	₹ 15.97
	Priming coat (A) Priming coat (Rate as per item no 12.31.1)	sqm	10.00	₹ 31.90	₹ 319.00
	Labour:				
0210	Carpenter 2nd class	Day	1.28	₹ 380.00	₹ 486.40
0203	Beldar	Day	1.43	₹ 300.00	₹ 429.00
05050	Rawl plug 50 mm (designation 10 no)	each	55.00	₹ 7.00	₹ 385.00
	TOTAL				₹ 11,425.37
	Add for water charges @ 1% on all except on 'A'				₹ 111.06
	TOTAL				₹ 11,536.43
	Add 3% for sundries & contingencies except (A)				₹ 336.52
	Total				₹ 11,872.95
	Add 15% for contractor's profit and overheads except (A)				₹ 1,733.09
	Cost of 10 sqm.				₹ 13,606.04
	Cost of 1 sqm.				₹ 1,360.60
	Say				₹ 1,360.60
8.33	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood prelaminate one side decorative lamination on other side balancing lamination Grade I, Type II, IS : 12823 marked including priming coat on unexposed surface, with necessary fixing arrangement and screws etc. complete.				
8.33.3	25 mm thick				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 sqm.				
	Materials-				
	Particle board (three layer medium density)				
	25 mm thick = 10 sqm.+				
	Add wastage @ 10% = 1 sqm.				
	Toatal = 11 sqm.				

08217	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 25 mm thick	sqm	11.00	₹ 960.00	₹ 10,560.00
0473	Carriage of particle board	Cum	0.275	₹ 80.65	₹ 22.18
	Priming coat				
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	10.00	₹ 31.90	₹ 319.00
	Labour:				
0210	Carpenter 2nd class	Day	1.28	₹ 380.00	₹ 486.40
0203	Beldar	Day	1.43	₹ 300.00	₹ 429.00
05050	Rawl plug 50 mm (designation 10 no)	each	55.00	₹ 7.00	₹ 385.00
	TOTAL				₹ 12,201.58
	Add for water charges @ 1% on all except on 'A'				₹ 118.83
	ATOTAL				₹ 12,320.41
	Add 3% for sundries & contingencies except (A)				₹ 360.04
	Total				₹ 12,680.45
	Add 15% for contractor's profit and overheads except (A)				₹ 1,854.22
	Cost of 10 sqm.				₹ 14,534.67
	Cost of 1 sqm.				₹ 1,453.47
	Say				₹ 1,453.50
8.34	Providing and fixing specified wood frame work consisting of battens 50 × 25 mm fixed with rawl plug and drilling necessary holes for rawl plug etc. including priming coat complete.				
8.34.1	Gamair Wood				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 5 no. battens of size 500cm × 50mm × 25mm (31.25 cudm)				
	Materials-				
	Gamair wood-5 × 5.00 × 0.50 × 0.025 = 0.03125 cum+				
	Add wastage @ 5% = 0.00156 cum.				
	Total = 0.03281 cum.				
	Say 33 cudm.				
08283	Gamair Wood	10 cudm	33.00	₹ 350.00	₹ 1,155.00
0473	Carriage of timber	cum	0.033	₹ 80.65	₹ 2.66
	Labour:				
0209	Carpenter 1 st class	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	Painting with ready mixed priming coat on ground				
	5 × 500 × 15 cm = 3.75 sqm				
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	3.75	₹ 31.90	₹ 119.63
05050	Rawl plug 50 mm (designation 10 no)	each	55.00	₹ 7.00	₹ 385.00
	TOTAL				₹ 2,162.29
	Add for water charges @ 1% on all except on 'A'				₹ 20.43
	ATOTAL				₹ 2,182.72

	Add 3% for sundries & contingencies except (A)				₹	61.89
	Total				₹	2,244.61
	Add 15% for contractor's profit and overheads except (A)				₹	318.75
	Cost of 31.25 cu dm.				₹	2,563.36
	Cost of 1 cum.				₹	82,027.52
	Say				₹	82,027.50
8.35	Providing and fixing decorative plywood 4 mm thick one side decorative veneer conforming to IS: 1328 (type-1) for plain lining / cladding with necessary screws, priming coat on unexposed surface with:					
8.35.1	Decorative veneer facings of approved manufacture.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 sqm.					
	Materials-					
	Teak ply wood = 10 sqm.+					
	Add for wastage @ 20% = 2 sqm.					
	Total = 12 sqm.					
08135	teak ply wood	sqm	12.00	₹ 400.00	₹	4,800.00
0473	Carriage of ply wood	Cum	0.048	₹ 80.65	₹	3.87
	Painting with ready mixed priming coat					
	(A) Priming coat (Rate as per item no 12.31.2)	sqm	10.00	₹ 32.30	₹	323.00
	Wooden plugs including cutting brick work and fixing in cement mortar					
	(B) (Rate as per item no 8.30 of SH : Wood work)	each	55.00	₹ 15.50	₹	852.50
	Labour-					
0209	Carpenter 1st class	Day	3.80	₹ 425.00	₹	1,615.00
0203	Beldar	Day	4.60	₹ 300.00	₹	1,380.00
0225	Mistry	Day	0.60	₹ 380.00	₹	228.00
	TOTAL				₹	9,202.37
	Add for water charges @ 1% on all except (A+B)				₹	80.27
	TOTAL				₹	9,282.64
	Add 3% for sundries & contingencies except (A+B)				₹	243.21
	Total				₹	9,525.85
	Add 15% for contractor's profit and overheads except (A+B)				₹	1,252.55
	Cost of 10 sqm.				₹	10,778.40
	Cost of 1 sqm.				₹	1,077.84
	Say				₹	1,077.80
8.36	Providing and fixing 4mm thick coir veneer board, ISI marked IS : 14842 Plain lining with necessary screws, priming coat on unexposed surface etc., complete.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 sqm.					
	Materials-					
	Coir veneered board 4mm thick					
	Add for wastage @ 20%					
	Total					

08228	Coir veneered board 4mm thick	sqm	12.00	₹	315.00	₹	3,780.00
0473	Carriage of Coir veneered board	Cum	0.048	₹	80.65	₹	3.87
	Painting with ready mixed priming coat						
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	10.00	₹	31.90	₹	319.00
	Wooden plugs including cutting brick work and fixing in cement mortar						
	(B) (Rate as per item no 8.30 of SH : Wood work)	each	55.00	₹	15.50	₹	852.50
	Labour-						
0209	Carpenter 1st class	Day	3.80	₹	425.00	₹	1,615.00
0203	Beldar	Day	4.60	₹	300.00	₹	1,380.00
0225	Mistry	Day	0.60	₹	380.00	₹	228.00
	TOTAL					₹	8,178.37
	Add for water charges @ 1% on all except (A+B)					₹	70.07
	TOTAL					₹	8,248.44
	Add 3% for sundries & contingencies except (A+B)					₹	212.31
	Total					₹	8,460.75
	Add 15% for contractor's profit and overheads except (A+B)					₹	1,093.39
	Cost of 10 sqm.					₹	9,554.14
	Cost of 1 sqm.					₹	955.41
	Say					₹	955.40
8.37	Providing and fixing skirting of prelaminated with (one side decorative and other side balancing lamination) flat pressed, 3 layer or graded particle board (medium density) Grade I, Type II, IS : 12823 marked, with necessary fixing arrangements and screws including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete.						
8.37.1	18 mm thick						
Code	Description	Unit	Quantity		Rate		Rate
	Details of cost for skirting 200 mm wide and						
	30 m long Area = 0.2						
	× 30 = 6 sqm.						
	Area = 0.2						
	× 30 = 6 sqm.						
	Materials-						
	Teak shade prelaminated Particle board						
	(three layer medium density)						
	= 6.0 sqm.+						
	Add wastage @ 10%						
	= 0.6 sqm.						
	Total						
	= 6.6 sqm.						
08216	Particle board 18 mm thick	sqm	6.60	₹	890.00	₹	5,874.00
0473	Carriage of particle board	Cum	0.1188	₹	80.65	₹	9.58
05050	Rawl plug 50 mm (designation 10 no)	each	102.00	₹	7.00	₹	714.00
	Labour:-						
	For dressing and fixing particle board to skirting						
0210	Carpenter 2nd class	Day	0.77	₹	380.00	₹	292.60
0203	Beldar	Day	0.86	₹	300.00	₹	258.00
	Painting with ready mixed priming coat at back						

	(A) Priming coat (Rate as per item no 12.31.1)	sqm	6.00	₹	31.90	₹	191.40
	TOTAL					₹	7,339.58
	Add for water charges @ 1% on all except 'A'					₹	71.48
	TOTAL					₹	7,411.06
	Add 3% for sundries & contingencies except (A)					₹	216.59
	Total					₹	7,627.65
	Add 15% for contractor's profit and overheads except (A)					₹	1,115.44
	Cost of 6 sqm.					₹	8,743.09
	Cost of 1 sqm.					₹	1,457.18
	Say					₹	1,457.20
8.37	Providing and fixing skirting of prelamated with (one side decorative and other side balancing lamination) flat pressed, 3 layer or graded particle board (medium density) Grade I, Type II, IS : 12823 marked, with necessary fixing arrangements and screws including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete.						
8.37.2	25 mm thick						
Code	Description	Unit	Quantity		Rate		Rate
	Details of cost for skirting 200 mm wide and 30m long						
	Area = 0.2 × 30 = 6 sqm.						
	Materials-						
	Teak shade prelamated Particle board (three layer medium density) = 6.0 sqm.+						
	Add wastage @ 10% = 0.6 sqm.						
	Total = 6.6 sqm.						
08217	Particle board 25 mm thick	sqm	6.60	₹	960.00	₹	6,336.00
0473	Carriage of particle board	Cum	0.165	₹	80.65	₹	13.31
05050	Rawl plug 50 mm (designation 10 no)	each	102.00	₹	7.00	₹	714.00
	Labour:-						
	For dressing and fixing particle board to skirting						
0210	Carpenter 2nd class	Day	0.77	₹	380.00	₹	292.60
0203	Beldar	Day	0.86	₹	300.00	₹	258.00
	Painting with ready mixed priming coat at back						
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	6.00	₹	31.90	₹	191.40
	TOTAL					₹	7,805.31
	Add for water charges @ 1% on all except 'A'					₹	76.14
	TOTAL					₹	7,881.45
	Add 3% for sundries & contingencies except (A)					₹	230.70
	Total					₹	8,112.15
	Add 15% for contractor's profit and overheads except (A)					₹	1,188.11
	Cost of 6 sqm.					₹	9,300.26
	Cost of 1 sqm.					₹	1,550.04
	Say					₹	1,550.00

8.38	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :				
8.38.1	Gamair Wood				
8.38.1.1	50×12 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for beading for a window of size 140×110 cm i.e. 500 cm long (5 metre)				
	Materials-				
	Gamair wood in planks				
	500 × 5 × 1.2 cm				
	= 0.003 cum+				
	Add for wastage @ 10%				
	= 0.0003 cum.				
	Total				
	= 0.0033 cum.				
	Say				
	3.3 cudm.				
08283	Gamair Wood	10 cudm	3.30	₹ 350.00	₹ 115.50
0473	Carriage of timber	cum	0.0033	₹ 80.65	₹ 0.27
08066	Iron screws 40 mm	100 Nos	36.00	₹ 60.00	₹ 21.60
	Painting with priming coat Area =				
	(5 + 1.2 + 1.2) = 0.37 sqm				
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	0.37	₹ 31.90	₹ 11.80
	Labour-				
	For plaining, fixing and making design				
0209	Carpenter 1st class	Day	0.53	₹ 425.00	₹ 225.25
	TOTAL				₹ 374.42
	Add for water charges @ 1% on all except (A)				₹ 3.63
	TOTAL				₹ 378.05
	Add 3% for sundries & contingencies except (A)				₹ 10.99
	Total				₹ 389.04
	Add 15% for contractor's profit and overheads except (A)				₹ 56.59
	Cost of 5 m.				₹ 445.63
	Cost of 1m				₹ 89.13
	Say				₹ 89.10
8.38	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :				
8.38.1	Gamair Wood				
8.38.1.2	50 × 20 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for beading of a window of size				
	140 × 110 cm i.e. 500cm. long (5metre)				
	Materials-				
	Gamair Wood in planks				
	500 × 5 × 2.0 cm				
	= 0.005cum+				
	Add for wastage @ 10%				
	= 0.0005 cum.				
	Total				
	= 0.0055 cum.				

	Say 5.5 cu dm.				
08283	Gamair Wood	10 cu dm	5.50	₹ 350.00	₹ 192.50
0473	Carriage of timber	cum	0.0055	₹ 80.65	₹ 0.44
08066	Iron screws 40 mm	100 Nos	36.00	₹ 60.00	₹ 21.60
	Painting with priming coat Area =				
	500 (5 + 2 + 2) = 0.45 sqm				
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	0.45	₹ 31.90	₹ 14.36
	Labour-				
	For plaining, fixing and making design				
0209	Carpenter 1 st class	Day	0.53	₹ 425.00	₹ 225.25
	TOTAL				₹ 454.15
	Add for water charges @ 1% on all except (A)				₹ 4.40
	TOTAL				₹ 458.55
	Add 3% for sundries & contingencies except (A)				₹ 13.33
	Total				₹ 471.88
	Add 15% for contractor's profit and overheads except (A)				₹ 68.63
	Cost of 5 m.				₹ 540.51
	Cost of 1m				₹ 108.10
	Say				₹ 108.10
8.38	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :				
8.38.2	Local Teak Wood- scantling				
8.38.2.1	50 × 12 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for beading for a window of size 140×110 cm i.e. 500 cm long (5 metre)				
	Materials-				
	Local Teak wood in planks				
	500 × 5 × 1.2 cm				
	= 0.003 cum+				
	Add for wastage @ 10%				
	= 0.0003 cum.				
	Total				
	= 0.0033 cum.				
	Say				
	3.3 cu dm.				
08280	Local Teak Wood- scantling	10 cu dm	3.30	₹ 257.00	₹ 84.81
0473	Carriage of timber	cum	0.0033	₹ 80.65	₹ 0.27
08066	Iron screws 40 mm	100 Nos	36.00	₹ 60.00	₹ 21.60
	Painting with priming coat Area =				
	(5 + 1.2 + 1.2) = 0.37 sqm				
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	0.37	₹ 31.90	₹ 11.80
	Labour-				
	For plaining, fixing and making design				
0209	Carpenter 1st class	Day	0.53	₹ 425.00	₹ 225.25
	TOTAL				₹ 343.73

	Add for water charges @ 1% on all except (A)				₹	3.32
	TOTAL				₹	347.05
	Add 3% for sundries & contingencies except (A)				₹	10.06
	Total				₹	357.11
	Add 15% for contractor's profit and overheads except (A)				₹	51.80
	Cost of 5 m.				₹	408.91
	Cost of 1m				₹	81.78
	Say				₹	81.80
8.38	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :					
8.38.2	Local Teak Wood- scantling					
8.38.2.2	50×20 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for beading of a window of size					
	140 × 110 cm i.e. 500cm. long (5metre)					
	Materials-					
	Local Teak Wood in planks					
	500 × 5 × 2.0 cm					
	= 0.005cum+					
	Add for wastage @ 10%					
	= 0.0005 cum.					
	Total					
	= 0.0055 cum.					
	Say					
	5.5 cudm.					
08280	Local Teak Wood- scantling	10 cudm	5.50	₹ 257.00	₹	141.35
0473	Carriage of timber	cum	0.0055	₹ 80.65	₹	0.44
08066	Iron screws 40 mm	100 Nos	36.00	₹ 60.00	₹	21.60
	Painting with priming coat Area =					
	500 (5 + 2 + 2)= 0.45 sqm					
	(A) Priming coat (Rate as per item no 12.31.1)	sqm	0.45	₹ 31.90	₹	14.36
	Labour-					
	For plaining, fixing and making design					
0209	Carpenter 1 st class	Day	0.53	₹ 425.00	₹	225.25
	TOTAL				₹	403.00
	Add for water charges @ 1% on all except (A)				₹	3.89
	TOTAL				₹	406.89
	Add 3% for sundries & contingencies except (A)				₹	11.78
	Total				₹	418.67
	Add 15% for contractor's profit and overheads except (A)				₹	60.65
	Cost of 5 m.				₹	479.32
	Cost of 1m				₹	95.86
	Say				₹	95.90
8.39	Providing and fixing plain jaffri of 35 × 10 mm laths placed 35 mm apart (frames to be paid separately) including fixing 50 × 12 mm beading complete with :					
8.39.1	Gamair Wood					
Code	Description	Unit	Quantity	Rate	Rate	

	Details of cost of a jaffri 200 × 110 cm = 2.20 Sqm				
	Materials-				
	Gamair Wood				
	Jaffri 210 × 120 × 1.0 cm = 0.025 cum.+				
	Beading 660 × 5 × 1.2 cm = 0.004 cum.				
	Total = 0.029 cum.+				
	Add wastage @ 10% = 0.003 cum.				
	Total = 0.032 cum.				
	Say 32 cudm.				
08283	Gamair Wood	10 cudm	32.00	₹ 350.00	₹ 1,120.00
0473	Carriage of timber	cum	0.032	₹ 80.65	₹ 2.58
	Labour-				
0209	Carpenter 1 st class	Day	0.75	₹ 425.00	₹ 318.75
0210	Carpenter 2nd class	Day	1.00	₹ 380.00	₹ 380.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
0225	Mistry	Day	0.10	₹ 380.00	₹ 38.00
	TOTAL				₹ 2,009.33
	Add 1% for water charges				₹ 20.09
	TOTAL				₹ 2,029.42
	Add 3% for sundries & contingencies				₹ 60.88
	Total				₹ 2,090.30
	Add 15% for contractor's profit and overheads				₹ 313.55
	Cost of 2.2 sqm.				₹ 2,403.85
	Cost of 1 sqm.				₹ 1,092.66
	Say				₹ 1,092.70
8.40	Providing and fixing 18 mm thick, 150 mm wide pelmet of flat pressed 3 layer or graded wood particle board medium density grade I, IS : 3087 marked including top cover of 6 mm commercial ply wood conforming to IS: 303 BWR grade, nickel plated M.S. pipe 20 mm dia (heavy type) curtain rod with nickel plated brackets including fixing with 25 × 3 mm M.S. flat 10 cm long and rawl plugs 50 mm long (designation 10 no.) etc. all complete.				
Code	Description		Unit	Quantity	Rate
	Details of cost for a pelmet 2.00 m long				
	Materials-				
08182	(i) 18 mm thick particle board (medium density exterior grade)				
	Front- 1 × 1.7 × 0.15 = 0.255 sqm.+				
	Sides- 2 × 0.15 × 0.15 = 0.045 sqm.				
	Total = 0.300 sqm.+				
	Add wastage @ 5% = 0.015 sqm.				
	Total = 0.315 sqm.				
	Say 0.32 sqm.	Sqm	0.32	₹ 455.00	₹ 145.60
	6mm thick commercial ply wood				

	Top- 0.255 sqm.+ $1 \times 1.7 \times 0.15 =$				
	Add wastage @ 5% 0.013 sqm.	=			
	Total = 0.268 sqm.				
	Say 0.27 sqm.				
08148	Ply wood 5 ply with commercial ply on both faces 6 mm thick	sqm	0.27	₹ 455.00	₹ 122.85
08175	Nickle plated M.S. pipe 20 mm dia.	metre	1.65	₹ 100.00	₹ 165.00
08176	Nickle plated M.S. Brackets for curtain rod 20 mm	each	2.0	₹ 10.00	₹ 20.00
5026	M.S. flat 25 × 3 mm and 10 cm long over brackets	Qtl	0.0059	₹ 3,992.00	₹ 23.55
05050	Rawl plug 50 mm (designation 10 no)	each	2.0	₹ 7.00	₹ 14.00
	Labour-				
0210	Carpenter 2nd class	Day	0.18	₹ 380.00	₹ 68.40
0203	Beldar	Day	0.18	₹ 300.00	₹ 54.00
0225	Mistry	Day	0.11	₹ 380.00	₹ 41.80
	TOTAL				₹ 655.20
	Add for water charge @ 1%				₹ 6.55
	TOTAL				₹ 661.75
	Add 3% for sundries & contingencies				₹ 19.85
	Total				₹ 681.60
	Add 15% for contractor's profit and overheads				₹ 102.24
	Cost of 2 m				₹ 783.84
	Cost of 1 m.				₹ 391.92
	Say				₹ 391.90
8.41	Providing and fixing 18 mm thick, 150 mm wide pelmet of coir veneer board ISI marked IS : 14842 - 2000, including top cover of 6 mm coir veneer board, nickel plated M.S. Pipe 20 mm dia (heavy type) curtain rod with nickel plated brackets including fixing with 25 × 3 mm M.S. flat 10 cm long and rawl plugs 50 mm long (designation 10 no.) etc. all complete.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for a pelmet 2m long				
	Materials-				
	(i) 18mm thick Coir veneered board				
	Front- = 0.255 sqm.+ $1 \times 1.7 \times 0.15$				
	Sides- 0.045 sqm. $2 \times 0.15 \times 0.15 =$				
	Total = 0.300 sqm.+				
	Add wastage @ 5% 0.015 sqm.	=			
	Total = 0.315 sqm.				
	Say 0.32 sqm.				
08230	Coir veneered board 18mm thick	sqm	0.32	₹ 1,105.00	₹ 353.60
	6mm thick commercial ply wood				
	Top- 0.255 sqm.+ $1 \times 1.7 \times 0.15 =$				

	Add wastage @ 5% 0.013 sqm.	=				
	Total = 0.268 sqm.					
	Say 0.27 sqm.					
08229	Coir veneered board 6mm thick	sqm	0.27	₹ 420.00	₹ 113.40	
08175	Nickle plated M.S. pipe 20 mm dia.	metre	1.65	₹ 100.00	₹ 165.00	
08176	Nickle plated M.S. Brackets for curtain rod 20 mm	each	2.00	₹ 10.00	₹ 20.00	
5026	M.S. flat 25 × 3 mm and 10 cm long over brackets	Qtl	0.0059	₹ 3,992.00	₹ 23.55	
05050	Rawl plug 50 mm (designation 10 no)	each	2.0	₹ 7.00	₹ 14.00	
	Labour-					
0210	Carpenter 2nd class	Day	0.18	₹ 380.00	₹ 68.40	
0203	Beldar	Day	0.18	₹ 300.00	₹ 54.00	
0225	Mistry	Day	0.11	₹ 380.00	₹ 41.80	
	TOTAL				₹ 853.75	
	Add for water charge @ 1%				₹ 8.54	
	TOTAL				₹ 862.29	
	Add 3% for sundries & contingencies				₹ 25.87	
	Total				₹ 888.16	
	Add for contractor's profit and overheads @ 15%				₹ 133.22	
	Cost of 2 m				₹ 1,021.38	
	Cost of lm.				₹ 510.69	
	Say				₹ 510.70	
8.42	Extra for using veneered particle board conforming to IS 3097 Grade I, in item of pelmet 18mm thick 150mm wide.					
8.42.1.	Non decorative veneer on both sides.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for a pelmet 2m long					
	Materials-					
	(i) 18mm thick particle board (medium density exterior grade)					
	Front- $1 \times 1.7 \times 0.15$ = 0.255 sqm.+					
	Sides- $2 \times 0.15 \times 0.15 =$ 0.045 sqm.					
	Total = 0.300 sqm.+					
	Add wastage @ 5% 0.015 sqm.	=				
	Total = 0.315 sqm.					
	Say 0.32 sqm.					
08004	Extra cost for commercial veneering both sides	sqm	0.32	₹ 185.00	₹ 59.20	
	TOTAL				₹ 59.20	
	Add for water charge @ 1%				₹ 0.59	
	TOTAL				₹ 59.79	
	Add 3% for sundries & contingencies				₹ 1.79	
	Total				₹ 61.58	

	Add for contractor's profit and overheads @ 15%				₹	9.24
	Cost of 2 m				₹	70.82
	Cost of 1 m				₹	35.41
	Say				₹	35.40
8.42	Extra for using veneered particle board conforming to IS 3097 Grade I, in item of pelmet 18mm thick 150mm wide.					
8.42.2	Particle board with decorative veneering on both sides.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for a pelmet 2 m long					
	Materials-					
(i)	18mm thick particle board (medium density exterior grade)					
	Front- $1 \times 1.7 \times 0.15$ = 0.255 sqm.+					
	Sides- $2 \times 0.15 \times 0.15 =$ 0.045 sqm.					
	Total = 0.300 sqm.+					
	Add wastage @ 5% 0.015 sqm.	=				
	Total = 0.315 sqm.					
	Say 0.32 sqm.					
08005	Extra cost for prelaminated particle board with teak finish both sides	Sqm	0.32	₹ 520.00	₹	166.40
	TOTAL				₹	166.40
	Add for water charge @ 1%				₹	1.66
	TOTAL				₹	168.06
	Add 3% for sundries & contingencies				₹	5.04
	Total				₹	173.10
	Add for contractor's profit and overheads @ 15%				₹	25.97
	Cost of 2 m				₹	199.07
	Cost of 1 m				₹	99.54
	Say				₹	99.50
8.43	Providing and fixing teak wood lipping of size 25x3 mm in pelmet.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 metre					
	Materials-					
08181	Lipping with teak wood 25 × 3 mm	metre	10.00	₹ 35.00	₹	350.00
	Labour-					
0210	Carpenter 2nd class	Day	0.25	₹ 380.00	₹	95.00
0203	Beldar	Day	0.25	₹ 300.00	₹	75.00
	TOTAL				₹	520.00
	Add for water charge @ 1%				₹	5.20
	TOTAL				₹	525.20
	Add 3% for sundries & contingencies				₹	15.76
	Total				₹	540.96
	Add for contractor's profit and overheads @ 15%				₹	81.14
	Cost for 10 meter				₹	622.10

	Cost of 1 m				₹	62.21
	Say				₹	62.20
8.44	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete :					
8.44.1	12 mm dia.					
Code	Description	Unit	Quantity	Rate		Rate
	Details of cost for 2 m long					
	Materials-					
08057	C.P. brass curtain rod 12 mm dia	metre	2.0	₹ 210.00	₹	420.00
08172	C.P. brass brackets	each	2.0	₹ 10.00	₹	20.00
08055	C.P. brass screws	100 nos	4	₹ 130.00	₹	5.20
(A)	Wooden plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand) (Rate as per item no 8.30 of SH : Wood work)	each	2.00	₹ 15.50	₹	31.00
	TOTAL				₹	476.20
	Add for water charge @ 1% on all except (A)				₹	4.45
	TOTAL				₹	480.65
	Add 3% for sundries & contingencies on all except (A)				₹	13.49
	Total				₹	494.14
	Add for contractor's profit and overheads @ 15% on all except (A)				₹	69.47
	Cost of 2 m				₹	563.61
	Cost of 1 m				₹	281.81
	Say				₹	281.80
8.44	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete :					
8.44.2	20 mm dia.					
Code	Description	Unit	Quantity	Rate		Rate
	Details of cost for 2 m long					
	Materials-					
08058	C.P. brass curtain rod 20 mm dia	metre	2.0	₹ 270.00	₹	540.00
08172	C.P. brass brackets	each	2.0	₹ 10.00	₹	20.00
08055	C.P. brass screws	100 nos	4	₹ 130.00	₹	5.20
(A)	Wooden plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand) (Rate as per item no 8.30 of SH : Wood work)	each	2.00	₹ 15.50	₹	31.00
	TOTAL				₹	596.20
	Add for water charge @ 1% on all except (A)				₹	5.65
	TOTAL				₹	601.85
	Add 3% for sundries & contingencies on all except (A)				₹	17.13
	Total				₹	618.98
	Add for contractor's profit and overheads @ 15% on all except (A)				₹	88.20
	Cost of 2 m				₹	707.18
	Cost of 1 m				₹	353.59

	Say				₹ 353.60
8.44	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete :				
8.44.3	25 mm dia.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 2 m long				
	Materials-				
08059	C.P. brass curtain rod 25 mm dia	metre	2.0	₹ 380.00	₹ 760.00
08172	C.P. brass brackets	each	2.0	₹ 10.00	₹ 20.00
08055	C.P. brass screws	100 nos	4	₹ 130.00	₹ 5.20
(A)	Wooden plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand) (Rate as per item no 8.30 of SH : Wood work)	each	2.00	₹ 15.50	₹ 31.00
	TOTAL				₹ 816.20
	Add for water charge @ 1% on all except (A)				₹ 7.85
	TOTAL				₹ 824.05
	Add 3% for sundries & contingencies on all except (A)				₹ 23.79
	Total				₹ 847.84
	Add for contractor's profit and overheads @ 15% on all except (A)				₹ 122.53
	Cost of 2 m				₹ 970.37
	Cost of 1 m				₹ 485.19
	Say				₹ 485.20
8.45	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets:				
8.45.1	20 mm dia (heavy type)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 2 m long.				
	Materials :				
08179	(i) Nickel plated M.S. pipe 20 mm dia	metre	2.00	₹ 65.00	₹ 130.00
08176	(ii) Nickel plated M.S. bracket	each	2.00	₹ 10.00	₹ 20.00
08055	(iii) Screws	100 nos	4	₹ 130.00	₹ 5.20
05050	(v) Rawl plug 50 mm (designation 10 no)	each	2.00	₹ 7.00	₹ 14.00
	TOTAL				₹ 169.20
	Add for water charge @ 1 %				₹ 1.69
	TOTAL				₹ 170.89
	Add 3% for sundries & contingencies				₹ 5.13
	Total				₹ 176.02
	Add for contractor's profit and overheads @ 15%				₹ 26.40
	Cost for 2 meter				₹ 202.42
	Cost of 1 m				₹ 101.21
	Say				₹ 101.20
8.45	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :				
8.45.2	25 mm dia (heavy type)				
Code	Description	Unit	Quantity	Rate	Rate

	Details of cost for 2m long.				
	Materials:				
08180	(i) Nickel plated M.S. pipe 25 mm dia	metre	2.00	₹ 75.00	₹ 150.00
08177	(ii) Nickel plated M.S. bracket	each	2.00	₹ 10.00	₹ 20.00
08055	(iii) Screws	100 nos	4	₹ 130.00	₹ 5.20
05050	(v) Rawl plug 50 mm (designation 10 no)	each	2.00	₹ 7.00	₹ 14.00
	TOTAL				₹ 189.20
	Add for water charge @ 1%				₹ 1.89
	TOTAL				₹ 191.09
	Add 3% for sundries & contingencies				₹ 5.73
	Total				₹ 196.82
	Add for contractor's profit and overheads @ 15%				₹ 29.52
	Cost for 2 meter				₹ 226.34
	Cost of 1 m				₹ 113.17
	Say				₹ 113.20
8.46	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. all complete.				
8.46.1	Fixed to steel windows by welding.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for a grill 90 × 120 cm = 1.08 sqm.				
	Material-				
	M.S. bar 16mm diameter -				
	11 × 86 cm = 9.46 m @ 1.58kg / m = 14.95 kg+				
	Add wastage @ 10% = 1.50 kg				
	Total = 16.45 kg				
	Say 0.165 quintal				
08139	M.S. bar	quintal	0.165	₹ 4,010.00	₹ 661.65
	M.S. flat 25×3.15mm				
	2 × 120 cm = 2.40 m+				
	2 × 90 cm = 1.80 m+				
	1 × 120 cm = 1.20m+				
	2 × 15 cm = 0.30m				
	Total = 5.70 m				
	@ 0.63kg/m				
	= 3.59 kg+				
	Add wastage @ 10% = 0.36 kg				
	Total = 3.95 kg				
	Say 4 kg.				
	or 0.04 quintal				
5026	M.S. flat	quintal	0.04	₹ 3,992.00	₹ 159.68
0468	Carriage of steel 0.165 + 0.04 = 0.205 q = 0.0205 t				
	Say 0.02 tonne	tonne	0.02	₹ 110.94	₹ 2.22
	Labour-				
0206	Blacksmith 1st class	Day	0.86	₹ 425.00	₹ 365.50
0203	Beldar	Day	1.10	₹ 300.00	₹ 330.00
	TOTAL				₹ 1,519.05
	Add for water charge @ 1 %				₹ 15.19

	TOTAL				₹	1,534.24
	Add 3% for sundries & contingencies				₹	46.03
	Total				₹	1,580.27
	Add for contractor's profit and overheads @ 15%				₹	237.04
	Cost for 18.54 kg.				₹	1,817.31
	Cost for 1 kg.				₹	98.02
	Say				₹	98.00
8.46	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. all complete.					
8.46.2	Fixed to openings /wooden frames with rawl plugs screws etc.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for a grill 90 × 120 cm = 1.08 sqm.					
	Material -					
	M.S. bar 16mm dia. 11 × 86 cm = 9.46 m					
	@ 1.58kg / m = 14.95 kg+					
	Add wastage @ 10% = 1.50 kg.					
	Total = 16.45 kg.					
	Say 0.165quintal					
08139	M.S. bar	quintal	0.165	₹ 4,010.00	₹	661.65
	M.S. flat 25×3.15mm					
	2 × 120 cm = 2.40 m+					
	2 × 90 cm = 1.80 m+					
	1 × 120 cm = 1.20m+					
	2 × 15 cm = 0.30m					
	Total = 5.70 m					
	@ 0.63kg/m					
	= 3.59 kg+					
	Add wastage @ 10% = 0.36 kg					
	Total = 3.95 kg					
	Say 4 kg.					
	or 0.04 quintal					
5026	M.S. flat	quintal	0.04	₹ 3,992.00	₹	159.68
0468	Carriage of steel 0.165 + 0.04 = 0.205 q = 0.0205 t					
	Say 0.02 tonne	tonne	0.02	₹ 110.94	₹	2.22
	Labour-					
0206	Blacksmith 1st class	Day	0.86	₹ 425.00	₹	365.50
0203	Beldar	Day	1.10	₹ 300.00	₹	330.00
05050	Rawl plug 50 mm (designation 10 no)	each	8.00	₹ 7.00	₹	56.00
	TOTAL				₹	1,575.05
	Add for water charge @ 1 %				₹	15.75
	TOTAL				₹	1,590.80
	Add 3% for sundries & contingencies				₹	47.72
	Total				₹	1,638.52
	Add for contractor's profit and overheads @ 15%				₹	245.78
	Cost for 18.54 kg.				₹	1,884.30

	Cost for 1 kg.				₹	101.63
	Say				₹	101.60
8.47	Providing and fixing expanded metal 20 x 60 mm strands 3.25 mm wide and 1.6 mm thick for windows etc. including 62 x 19 mm beading of Gamair wood.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for a window of size					
	140 × 110 cm = 1.54 sqm.					
	Materials-					
	Expanded metal -20 × 60 mm mesh 3.2 mm wide					
	= 1.4 × 1.1 m = 1.54 sqm.+					
	Add wastage @ 10% = 0.15 sqm.					
	Total = 1.69 sqm.					
5034	Expanded metal -.	sqm	1.69	₹ 314.00	₹	530.66
0468	Carriage	tonne	0.002	₹ 110.94	₹	0.22
	Gamair wood beading					
	5 m × 62 mm × 19 mm = 0.0059 cum.+					
	Add wastage @ 10% =					
	0.00059 cum					
	= 0.00649 cum					
	Say 6 cudm					
08283	Gamair Wood	10 cudm	6.00	₹ 350.00	₹	210.00
0473	Carriage of timber	cum	0.006	₹ 80.65	₹	0.48
	Labour-					
0210	Carpenter 2nd class	Day	0.33	₹ 380.00	₹	125.40
0203	Beldar	Day	0.25	₹ 300.00	₹	75.00
	TOTAL				₹	941.76
	Add for water charge @ 1 %				₹	9.42
	TOTAL				₹	951.18
	Add 3% for sundries & contingencies				₹	28.54
	Total				₹	979.72
	Add for contractor's profit and overheads @ 15%				₹	146.96
	Cost of 1.54 sqm.				₹	1,126.68
	Cost of 1 sqm.				₹	731.61
	Say				₹	731.60
8.48	Providing and fixing hard drawn steel wire fabric 75 x 25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62 x 19 mm beading of Gamair wood.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for a window of size					
	140 × 110 cm = 1.54 sqm.					
	Materials-					
	Hard drawn steel wire fabric -20 × 60 mm mesh 3.2 mm wide					
	= 1.4 × 1.1 m = 1.54 sqm.+					
	Add wastage @ 10% = 0.15 sqm.					
	Total = 1.69 sqm.					
5032	Hard drawn steel wire fabric	sqm	1.69	₹ 535.00	₹	904.15

0468	Carriage	tonne	0.013	₹	110.94	₹	1.44
	Gamair wood beading						
	5 m × 62 mm × 19 mm = 0.0059 cum.+						
	Add wastage @ 10% =						
	0.00059 cum						
	= 0.00649 cum						
	Say 6 cudm						
08283	Gamair Wood	10 cudm	6.00	₹	350.00	₹	210.00
0473	Carriage of timber	cum	0.006	₹	80.65	₹	0.48
	Labour-						
0210	Carpenter 2nd class	Day	0.33	₹	380.00	₹	125.40
0203	Beldar	Day	0.25	₹	300.00	₹	75.00
	TOTAL					₹	1,316.47
	Add for water charge @ 1 %					₹	13.16
	TOTAL					₹	1,329.63
	Add 3% for sundries & contingencies					₹	39.89
	Total					₹	1,369.52
	Add for contractor's profit and overheads @ 15%					₹	205.43
	Cost of 1.54 sqm.					₹	1,574.95
	Cost of 1 sqm.					₹	1,022.69
	Say					₹	1,022.70
8.49	Providing and fixing fly proof galvanised M.S. wire gauge to windows and clerestory windows using galvanised M.S. wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.63 mm.						
8.49.1	With Gamair wood beading 62 × 19 mm.						
Code	Description	Unit	Quantity	Rate		Rate	
	Details of cost for a window of size						
	140 × 110 cm = 1.54 sqm.						
	Materials-						
	Wire gauge -20 × 60 mm mesh 3.2 mm wide						
	= 1.4 × 1.1 m = 1.54 sqm.+						
	Add wastage @ 10% = 0.15 sqm.						
	Total = 1.69 sqm.						
08173	Wire gauge	sqm	1.69	₹	275.00	₹	464.75
0468	Carriage of wire fabric	tonne	0.013	₹	110.94	₹	1.44
	Gamair wood beading						
	5 m × 62 mm × 19 mm = 0.0059 cum.+						
	Add wastage @ 10% =						
	0.00059 cum						
	= 0.00649 cum						
	Say 6 cudm						
08283	Gamair Wood	10 cudm	6.00	₹	350.00	₹	210.00
0473	Carriage of timber	cum	0.006	₹	80.65	₹	0.48
	Labour-						
0210	Carpenter 2nd class	Day	0.33	₹	380.00	₹	125.40
0203	Beldar	Day	0.25	₹	300.00	₹	75.00
	TOTAL					₹	877.07
	Add for water charge @ 1%					₹	8.77
	TOTAL					₹	885.84

	Add 3% for sundries & contingencies				₹	26.58
	Total				₹	912.42
	Add for contractor's profit and overheads @ 15%				₹	136.86
	Cost of 1.54 sqm.				₹	1,049.28
	Cost of 1 sqm.				₹	681.35
	Say				₹	681.40
8.49	Providing and fixing fly proof galvanised M.S. wire gauge to windows and clerestory windows using galvanised M.S. wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.63 mm.					
8.49.2	With 12 mm mild steel U beading.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for a window of size					
	140 × 110 cm = 1.54 sqm.					
	Materials-					
	Wire gauge -20 × 60 mm mesh 3.2 mm wide					
	= 1.4 × 1.1 m = 1.54 sqm.+					
	Add wastage @ 10% = 0.15 sqm.					
	Total = 1.69 sqm.					
08173	Wire gauge	sqm	1.69	₹ 275.00	₹	464.75
0468	Carriage of wire fabric	tonne	0.013	₹ 110.94	₹	1.44
08205	12 mm mild steel U beading	metre	5.00	₹ 20.00	₹	100.00
	Labour-					
0210	Carpenter 2nd class	Day	0.33	₹ 380.00	₹	125.40
0203	Beldar	Day	0.25	₹ 300.00	₹	75.00
	TOTAL				₹	766.59
	Add for water charge @ 1%				₹	7.67
	TOTAL				₹	774.26
	Add 3% for sundries & contingencies				₹	23.23
	Total				₹	797.49
	Add for contractor's profit and overheads @ 15%				₹	119.62
	Cost of 1.54 sqm.				₹	917.11
	Cost of 1 sqm.				₹	595.53
	Say				₹	595.50
8.50	Deduct for fixing 75 × 25 mm hard drawn steel wire fabric of weight not less than 7.75 Kg. per sqm in panelled and glazed door and window shutter instead of glass sheet 4 mm thick.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 1 sqm.					
	Materials-					
5032	Hard drawn steel wire fabric	sqm	1.00	₹ 535.00	₹	535.00
08146	Glass 10 kg/sqm (4 mm)	sqm	1.00	₹ 360.00	₹	360.00
	Difference of cost				₹	175.00
	Add for water charge @ 1 %				₹	1.75
	TOTAL				₹	176.75
	Add 3% for sundries & contingencies				₹	5.30
	Total				₹	182.05
	Add for contractor's profit and overheads @ 15%				₹	27.31
	Extra cost for 1 sqm.				₹	209.36

	Say				₹ 209.40
8.51	Providing 40 × 5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30 × 10 × 15 cm 1:3:6 mix (1 cement : 3 fine sand : 6 graded stone aggregate 20mm nominal size)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 hold fast				
	Materials-				
5026	M.S.flat 40 × 5mm 40 cm long @ 1.68 kg / m				
	=0.672 kg = 0.0067 quintal	quintal	0.0067	₹ 3,992.00	₹ 26.75
0468	Carriage of steel	tonne	0.00067	₹ 110.94	₹ 0.07
	Cement concrete 1:3:6				
	30 × 10 × 15 cm = 0.0045 cum.+				
	Add wastage @ 10%				
	0.00045 cum.				
	Total =				
	Say 0.005 cum.				
(A)	(Rate as per item no 4.1.5)	cum	0.005	₹ 7,567.60	₹ 37.84
08070	Bolts and nuts	Nos	2	₹ 10.00	₹ 20.00
	Labour-				
0207	Blacksmith 2nd class	Day	0.03	₹ 380.00	₹ 11.40
0219	Mason 1st class	Day	0.03	₹ 425.00	₹ 12.75
0203	Beldar	Day	0.03	₹ 300.00	₹ 9.00
	TOTAL				₹ 117.81
	Add for water charge @ 1% on all except (A)				₹ 0.80
	TOTAL				₹ 118.61
	Add 3% for sundries & contingencies on all except (A)				₹ 2.42
	Total				₹ 121.03
	Add for contractor's profit and overheads @ 15% on all except (A)				₹ 12.48
	Cost for 1 hold fast				₹ 133.51
	Say				₹ 133.50
8.52	Providing beams including hoisting, fixing in position and applying wood preservative for the unexposed surfaces, etc. complete with :				
8.52.1	Sal wood.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for a beam				
	450 × 30 × 15 cm = 0.203 cum. Or 203 cudm.				
	Materials-				
	Sal wood =				
	203 cudm.+				
	Add wastage @ 2% =				
	4.06 cudm.				
	Total =				
	207.06 cudm.				
	Say 207.1 cudm.				
08288	Sal wood	10 cudm	207.10	₹ 450.00	₹ 9,319.50
0473	Carriage of timber	cum	0.207	₹ 80.65	₹ 16.69
(A)	wood preservative coat				
	(Rate as per item no 12.38)	sqm	0.54	₹ 20.90	₹ 11.29
	Labour-				
0210	Carpenter 2nd class	Day	0.70	₹ 380.00	₹ 266.00
0203	Beldar	Day	1.45	₹ 300.00	₹ 435.00
0201	Bandhani	Day	0.70	₹ 300.00	₹ 210.00

	TOTAL				₹	10,258.48
	Add for water charge @ 1 % on all except (A)				₹	102.47
	TOTAL				₹	10,360.95
	Add 3% for sundries & contingencies on all except (A)				₹	310.49
	Total				₹	10,671.44
	Add for contractor's profit and overheads @ 15% on all except (A)				₹	1,599.02
	Cost for 203 cudm.				₹	12,270.46
	Cost of 1 cum.				₹	60,445.62
	Say				₹	60,445.60
8.52	Providing beams including hoisting, fixing in position and applying wood preservative for the unexposed surfaces, etc. complete with :					
8.52.2	Gamair Wood					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for a beam					
	450 × 30 × 15 cm = 0.203 cum. Or 203 cudm.					
	Materials-					
	Gamair wood = 203 cudm.+					
	Add wastage @ 2% = 4.06 cudm.					
	Total = 207.06 cudm.					
	Say 207.1 cudm.					
08283	Gamair Wood	10 cudm	207.10	₹ 350.00	₹	7,248.50
0473	Carriage of timber	cum	0.207	₹ 80.65	₹	16.69
(A)	Priming coat (wood preservative) (Rate as per item no 12.38)	sqm	0.54	₹ 20.90	₹	11.29
	Labour-					
0210	Carpenter 2nd class	Day	0.70	₹ 380.00	₹	266.00
0203	Beldar	Day	1.45	₹ 300.00	₹	435.00
0201	Bandhani	Day	0.70	₹ 300.00	₹	210.00
	TOTAL				₹	8,187.48
	Add for water charge @ 1 % on all except (A)				₹	81.76
	TOTAL				₹	8,269.24
	Add 3% for sundries & contingencies on all except (A)				₹	247.74
	Total				₹	8,516.98
	Add for contractor's profit and overheads @ 15% on all except (A)				₹	1,275.85
	Cost for 203 cudm.				₹	9,792.83
	Cost of 1 cum.				₹	48,240.54
	Say				₹	48,240.50
8.53	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :					
8.53.1	125 × 65 × 2.12 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for ten					
	Materials-					
08060	Butt hinges 125 × 65 × 2.12 mm	10 Nos	10.00	₹ 155.00	₹	155.00
08065	Iron screws 50 mm	100 Nos	80.00	₹ 75.00	₹	60.00
0468	Carriage of materials	tonne	0.0135	₹ 110.94	₹	1.50

	Labour-				
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 296.70
	Add for water charge @ 1%				₹ 2.97
	TOTAL				₹ 299.67
	Add 3% for sundries & contingencies				₹ 8.99
	Total				₹ 308.66
	Add for contractor's profit and overheads @ 15%				₹ 46.30
	Cost of 10 hinges				₹ 354.96
	Cost of 1 butt hinge				₹ 35.50
	Say				₹ 35.50
8.53	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :				
8.53.2	100 × 58 × 1.90 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for ten				
	Materials-				
08061	Butt hinges 100 × 58 × 1.9 mm	10 Nos	10.00	₹ 100.00	₹ 100.00
08066	Iron screws 40 mm	100 Nos	80.00	₹ 60.00	₹ 48.00
0468	Carriage of materials	tonne	0.0086	₹ 110.94	₹ 0.95
	Labour-				
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 229.15
	Add for water charge @ 1%				₹ 2.29
	TOTAL				₹ 231.44
	Add 3% for sundries & contingencies				₹ 6.94
	Total				₹ 238.38
	Add for contractor's profit and overheads @ 15%				₹ 35.76
	Cost of 10 hinges				₹ 274.14
	Cost of 1 butt hinge				₹ 27.41
	Say				₹ 27.40
8.53	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :				
8.53.3	75 × 47 × 1.70 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for ten				
	Materials-				
08062	Butt hinges 175 × 47 × 1.7 mm	10 Nos	10.00	₹ 75.00	₹ 75.00
08067	Iron screws 30 mm	100 Nos	60.00	₹ 50.00	₹ 30.00
0468	Carriage of materials	tonne	0.011	₹ 110.94	₹ 1.22
	Labour-				
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 186.42
	Add for water charge @ 1 %				₹ 1.86
	TOTAL				₹ 188.28
	Add 3% for sundries & contingencies				₹ 5.65

	Total				₹	193.93
	Add for contractor's profit and overheads @ 15%				₹	29.09
	Cost of 10 hinges				₹	223.02
	Cost of 1 butt hinge				₹	22.30
	Say				₹	22.30
8.53	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :					
8.53.4	50 × 37 × 1.50 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for ten					
	Materials-					
08063	Butt hinges 50 × 37 × 1.5 mm	10 Nos	10.00	₹ 75.00	₹	75.00
08069	Iron screws 20 mm	100 Nos	40.00	₹ 35.00	₹	14.00
0468	Carriage of materials	tonne	0.002	₹ 110.94	₹	0.22
	Labour-					
0210	Carpenter 2nd class	Day	0.08	₹ 380.00	₹	30.40
	TOTAL				₹	119.62
	Add for water charge @ 1%				₹	1.20
	TOTAL				₹	120.82
	Add 3% for sundries & contingencies				₹	3.62
	Total				₹	124.44
	Add for contractor's profit and overheads @ 15%				₹	18.67
	Cost of 10 hinges				₹	143.11
	Cost of 1 butt hinge				₹	14.31
	Say				₹	14.30
8.54	Providing and fixing IS : 1341 marked M.S. heavy weight butt hinges with necessary screws etc. complete :					
8.54.1	125 × 90 × 4.00 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for ten					
	Materials-					
08250	M.S. heavy weight but hinges 125 × 90 × 4.0 mm	10 Nos	10.00	₹ 360.00	₹	360.00
	IS: 1341 marked.					
08065	Iron screws 50 mm	100 Nos	80.00	₹ 75.00	₹	60.00
0468	Carriage of materials	tonne	0.035	₹ 110.94	₹	3.88
	Labour-					
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹	53.20
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	504.08
	Add for water charge @ 1 %				₹	5.04
	TOTAL				₹	509.12
	Add 3% for sundries & contingencies				₹	15.27
	Total				₹	524.39
	Add for contractor's profit and overheads @ 15%				₹	78.66
	Cost of 10 hinges				₹	603.05
	Cost of 1 butt hinge				₹	60.31
	Say				₹	60.30

8.54	Providing and fixing IS : 1341 marked M.S. heavy weight butt hinges with necessary screws etc. complete :				
8.54.2	100 × 75 × 3.50 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for ten				
	Materials-				
08251	M.S. heavy weight butt hinges 100 × 75 × 3.5 mm	10 Nos.	10.00	₹ 200.00	₹ 200.00
	IS: 1341 marked				
08066	Iron screws 40 mm	100 Nos	80.00	₹ 60.00	₹ 48.00
0468	Carriage of materials	tonne	0.021	₹ 110.94	₹ 2.33
	Labour-				
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 330.53
	Add for water charge @ 1%				₹ 3.31
	TOTAL				₹ 333.84
	Add 3% for sundries & contingencies				₹ 10.02
	Total				₹ 343.86
	Add for contractor's profit and overheads @ 15%				₹ 51.58
	Cost of 10 hinges				₹ 395.44
	Cost of 1 butt hinge				₹ 39.54
	Say				₹ 39.50
8.54	Providing and fixing IS : 1341 marked M.S. heavy weight butt hinges with necessary screws etc. complete :				
8.54.3	75 × 60 × 3.10 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for ten				
	Materials-				
08252	M.S. heavy weight butt hinges 75 × 60 × 3.1 mm	10 Nos	10.00	₹ 110.00	₹ 110.00
	IS: 1341 marked				
08067	Iron screws 30 mm	100 Nos	60.00	₹ 50.00	₹ 30.00
0468	Carriage of materials	tonne	0.011	₹ 110.94	₹ 1.22
	Labour-				
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 221.42
	Add for water charge @ 1 %				₹ 2.21
	TOTAL				₹ 223.63
	Add 3% for sundries & contingencies				₹ 6.71
	Total				₹ 230.34
	Add for contractor's profit and overheads @ 15%				₹ 34.55
	Cost of 10 hinges				₹ 264.89
	Cost of 1 butt hinge				₹ 26.49
	Say				₹ 26.50
8.54	Providing and fixing IS : 1341 marked M.S. heavy weight butt hinges with necessary screws etc. complete :				
8.54.4	50 × 40 × 2.50 mm				
Code	Description	Unit	Quantity	Rate	Rate

	Details of cost for ten				
	Materials-				
08253	M.S. heavy weight butt hinges 50 × 40 × 2.5 mm	10 Nos	10.00	₹ 95.00	₹ 95.00
	IS: 1341 marked				
08069	Iron screws 20 mm	100 Nos	40.00	₹ 35.00	₹ 14.00
0468	Carriage of materials	tonne	0.004	₹ 110.94	₹ 0.44
	Labour-				
0210	Carpenter 2nd class	Day	0.08	₹ 380.00	₹ 30.40
	TOTAL				₹ 139.84
	Add for water charge @ 1 %				₹ 1.40
	TOTAL				₹ 141.24
	Add 3% for sundries & contingencies				₹ 4.24
	Total				₹ 145.48
	Add for contractor's profit and overheads @ 15%				₹ 21.82
	Cost of 10 hinges				₹ 167.30
	Cost of 1 butt hinge				₹ 16.73
	Say				₹ 16.70
8.55	Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary screws etc. complete.				
8.55.1	125 × 65 × 2.12 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08071	M.S. butt hinges (oxidised) 125 × 65 × 2.12 mm	10 Nos	10.00	₹ 162.00	₹ 162.00
08100	Iron screws (oxidised) 50 mm	100 Nos	80.00	₹ 88.00	₹ 70.40
0468	Carriage of materials	tonne	0.014	₹ 110.94	₹ 1.55
	Labour-				
0210	Carpenter II class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 314.15
	Add for water charge @ 1 %				₹ 3.14
	TOTAL				₹ 317.29
	Add 3% for sundries & contingencies				₹ 9.52
	Total				₹ 326.81
	Add for contractor's profit and overheads @ 15%				₹ 49.02
	Cost of 10 nos.				₹ 375.83
	Cost of 1 no				₹ 37.58
	Say				₹ 37.60
8.55	Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary screws etc. complete.				
8.55.2	100 × 58 × 1.90 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08072	M.S. butt hinges (oxidised) 100 × 58 × 1.9 mm	10 Nos	10.00	₹ 100.00	₹ 100.00
08101	Iron screws (oxidised) 40 mm	100 Nos	80.00	₹ 75.00	₹ 60.00
0468	Carriage of materials	tonne	0.013	₹ 110.94	₹ 1.44
	Labour-				

0210	Carpenter II class	Day	0.14	₹	380.00	₹	53.20
0203	Beldar	Day	0.09	₹	300.00	₹	27.00
	TOTAL					₹	241.64
	Add for water charge @ 1 %					₹	2.42
	TOTAL					₹	244.06
	Add 3% for sundries & contingencies					₹	7.32
	Total					₹	251.38
	Add for contractor's profit and overheads @ 15%					₹	37.71
	Cost of 10 nos.					₹	289.09
	Cost of 1 no					₹	28.91
	Say					₹	28.90
8.55	Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary screws etc. complete.						
8.55.3	75 × 47 × 1.70 mm						
Code	Description	Unit	Quantity	Rate		Rate	
	Details of cost for 10 nos.						
	Materials-						
08073	M.S. butt hinges (oxidised) 75 × 47 × 1.7 mm	10 Nos	10.00	₹	75.00	₹	75.00
08102	Iron screws (oxidised) 30 mm	100 Nos	60.00	₹	56.00	₹	33.60
0468	Carriage of materials	tonne	0.005	₹	110.94	₹	0.55
	Labour-						
0210	Carpenter II class	Day	0.14	₹	380.00	₹	53.20
0203	Beldar	Day	0.09	₹	300.00	₹	27.00
	TOTAL					₹	189.35
	Add for water charge @ 1 %					₹	1.89
	TOTAL					₹	191.24
	Add 3% for sundries & contingencies					₹	5.74
	Total					₹	196.98
	Add for contractor's profit and overheads @ 15%					₹	29.55
	Cost of 10 nos.					₹	226.53
	Cost of 1 no					₹	22.65
	Say					₹	22.70
8.55	Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary screws etc. complete.						
8.55.4	50 × 37 × 1.50 mm						
Code	Description	Unit	Quantity	Rate		Rate	
	Details of cost for 10 nos.						
	Materials-						
08074	M.S. butt hinges (oxidised) 50 × 37 × 1.5 mm	10 Nos	10.00	₹	68.00	₹	68.00
08104	Iron screws (oxidised) 20 mm	100 Nos	40.00	₹	45.00	₹	18.00
0468	Carriage of materials	tonne	0.002	₹	110.94	₹	0.22
	Labour-						
0210	Carpenter II class	Day	0.08	₹	380.00	₹	30.40
	TOTAL					₹	116.62
	Add for water charge @ 1 %					₹	1.17
	TOTAL					₹	117.79
	Add 3% for sundries & contingencies					₹	3.53
	Total					₹	121.32

	Add for contractor's profit and overheads @ 15%				₹ 18.20
	Cost of 10 nos.				₹ 139.52
	Cost of 1 no				₹ 13.95
	Say				₹ 14.00
8.56	Providing and fixing ISI marked oxidised M.S. pressed Parliamentary hinges with necessary screws etc. complete :				
8.56.1	150 × 125 × 27 × 2.80 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08075	M.S. parliamentary hinges (oxidised)	10 Nos	10.00	₹ 365.00	₹ 365.00
	150 × 125 × 27 × 2.8 mm				
08101	Iron screws (oxidised) 40 mm	100 Nos	80.00	₹ 75.00	₹ 60.00
0468	Carriage of materials	tonne	0.009	₹ 110.94	₹ 1.00
	Labour-				
0210	Carpenter II class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.14	₹ 300.00	₹ 42.00
	TOTAL				₹ 521.20
	Add for water charge @ 1 %				₹ 5.21
	TOTAL				₹ 526.41
	Add 3% for sundries & contingencies				₹ 15.79
	Total				₹ 542.20
	Add for contractor's profit and overheads @15%				₹ 81.33
	Cost of 10 nos.				₹ 623.53
	Cost of 1 no				₹ 62.35
	Say				₹ 62.40
8.56	Providing and fixing ISI marked oxidised M.S.pressed Parliamentary hinges with necessary screws etc. complete :				
8.56.2	125 × 125 × 27 × 2.80 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08076	M.S. parliamentary hinges (oxidised)	10 Nos	10.00	₹ 335.00	₹ 335.00
	125 × 125 × 27 × 2.8 mm				
08101	Iron screws (oxidised) 40 mm	100 Nos	80.00	₹ 75.00	₹ 60.00
0468	Carriage of materials	tonne	0.007	₹ 110.94	₹ 0.78
	Labour-				
0210	Carpenter II class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.14	₹ 300.00	₹ 42.00
	TOTAL				₹ 490.98
	Add for water charge @ 1 %				₹ 4.91
	TOTAL				₹ 495.89
	Add 3% for sundries & contingencies				₹ 14.88
	Total				₹ 510.77
	Add for contractor's profit and overheads @ 15%				₹ 76.62
	Cost of 10 nos.				₹ 587.39
	Cost of 1 no				₹ 58.74
	Say				₹ 58.70

8.56	Providing and fixing ISI marked oxidised M.S. pressed Parliamentary hinges with necessary screws etc. complete :				
8.56.3	100 × 125 × 27 × 2.80 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08077	M.S. parliamentary hinges (oxidised)	10 Nos	10.00	₹ 250.00	₹ 250.00
	100 × 125 × 27 × 2.8 mm				
08101	Iron screws (oxidised) 40 mm	100 Nos	80.00	₹ 75.00	₹ 60.00
0468	Carriage of materials	tonne	0.006	₹ 110.94	₹ 0.67
	Labour-				
0210	Carpenter II class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.14	₹ 300.00	₹ 42.00
	TOTAL				₹ 405.87
	Add for water charge @ 1 %				₹ 4.06
	TOTAL				₹ 409.93
	Add 3% for sundries & contingencies				₹ 12.30
	Total				₹ 422.23
	Add for contractor's profit and overheads @ 15%				₹ 63.33
	Cost of 10 nos.				₹ 485.56
	Cost of 1 no				₹ 48.56
	Say				₹ 48.60
8.56	Providing and fixing ISI marked oxidised M.S. pressed Parliamentary hinges with necessary screws etc. complete :				
8.56.4	75 × 100 × 20 × 2.24 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08078	M.S. parliamentary hinges (oxidised)	10 Nos	10.00	₹ 230.00	₹ 230.00
	75 × 100 × 20 × 2.24 mm				
08102	Iron screws (oxidised) 30 mm	100 Nos	60.00	₹ 56.00	₹ 33.60
0468	Carriage of materials	tonne	0.004	₹ 110.94	₹ 0.44
	Labour-				
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.14	₹ 300.00	₹ 42.00
	TOTAL				₹ 359.24
	Add for water charge @ 1 %				₹ 3.59
	TOTAL				₹ 362.83
	Add 3% for sundries & contingencies				₹ 10.88
	Total				₹ 373.71
	Add for contractor's profit and overheads @ 15%				₹ 56.06
	Cost of 10 nos.				₹ 429.77
	Cost of 1 no				₹ 42.98
	Say				₹ 43.00
8.57	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete :				
8.57.1	150 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				

08079	M.S. single acting spring hinges (oxidised) 150 mm	each	10.00	₹ 128.00	₹ 1,280.00
08100	Iron screws (oxidised) 50 mm	100 Nos	80.00	₹ 88.00	₹ 70.40
0468	Carriage of materials	tonne	0.004	₹ 110.94	₹ 0.44
	Labour-				
0210	Carpenter II class	Day	0.40	₹ 380.00	₹ 152.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 1,562.84
	Add for water charge @ 1 %				₹ 15.63
	TOTAL				₹ 1,578.47
	Add 3% for sundries & contingencies				₹ 47.35
	Total				₹ 1,625.82
	Add for contractor's profit and overheads @ 15%				₹ 243.87
	Cost of 10 nos.				₹ 1,869.69
	Cost of 1 no				₹ 186.97
	Say				₹ 187.00
8.57	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete :				
8.57.2	125 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08080	M.S. single acting spring hinges (oxidised) 125 mm	each	10.00	₹ 118.00	₹ 1,180.00
08100	Iron screws (oxidised) 50 mm	100 Nos	80.00	₹ 88.00	₹ 70.40
0468	Carriage of materials	tonne	0.0035	₹ 110.94	₹ 0.39
	Labour-				
0210	Carpenter II class	Day	0.40	₹ 380.00	₹ 152.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 1,462.79
	Add for water charge @ 1%				₹ 14.63
	TOTAL				₹ 1,477.42
	Add 3% for sundries & contingencies				₹ 44.32
	Total				₹ 1,521.74
	Add for contractor's profit and overheads @ 15%				₹ 228.26
	Cost of 10 nos.				₹ 1,750.00
	Cost of 1 no				₹ 175.00
	Say				₹ 175.00
8.57	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete :				
8.57.3	100 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08081	M.S. single acting spring hinges (oxidised) 100 mm	each	10.00	₹ 98.00	₹ 980.00
08101	Iron screws (oxidised) 40 mm	100 Nos	80.00	₹ 75.00	₹ 60.00
0468	Carriage of materials	tonne	0.003	₹ 110.94	₹ 0.33

	Labour-				
0210	Carpenter II class	Day	0.40	₹ 380.00	₹ 152.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 1,252.33
	Add for water charge @ 1 %				₹ 12.52
	TOTAL				₹ 1,264.85
	Add 3% for sundries & contingencies				₹ 37.95
	Total				₹ 1,302.80
	Add for contractor's profit and overheads @ 15%				₹ 195.42
	Cost of 10 nos.				₹ 1,498.22
	Cost of 1 no				₹ 149.82
	Say				₹ 149.80
8.58	Providing and fixing oxidised M.S. double acting spring hinges with necessary screws etc. complete.				
8.58.1	150 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08082	M.S. double acting spring hinges (oxidised)	each	10.00	₹ 125.00	₹ 1,250.00
	150 mm				
08100	Iron screws (oxidised) 50 mm	100 Nos	80.00	₹ 88.00	₹ 70.40
0468	Carriage of materials	tonne	0.004	₹ 110.94	₹ 0.44
	Labour-				
0210	Carpenter II class	Day	0.40	₹ 380.00	₹ 152.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 1,532.84
	Add for water charge @ 1%				₹ 15.33
	TOTAL				₹ 1,548.17
	Add 3% for sundries & contingencies				₹ 46.45
	Total				₹ 1,594.62
	Add for contractor's profit and overheads @ 15%				₹ 239.19
	Cost of 10 nos.				₹ 1,833.81
	Cost of 1 no				₹ 183.38
	Say				₹ 183.40
8.58	Providing and fixing oxidised M.S. double acting spring hinges with necessary screws etc. complete.				
8.58.2	125 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08083	M.S. double acting spring hinges (oxidised) 125 mm	each	10.00	₹ 130.00	₹ 1,300.00
08100	Iron screws (oxidised) 50 mm	100 Nos	80.00	₹ 88.00	₹ 70.40
0468	Carriage of materials	tonne	0.0035	₹ 110.94	₹ 0.39
	Labour-				
0210	Carpenter II class	Day	0.40	₹ 380.00	₹ 152.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 1,582.79
	Add for water charge @ 1 %				₹ 15.83
	TOTAL				₹ 1,598.62
	Add 3% for sundries & contingencies				₹ 47.96

	Total				₹	1,646.58
	Add for contractor's profit and overheads @ 15%				₹	246.99
	Cost of 10 nos.				₹	1,893.57
	Cost of 1 no				₹	189.36
	Say				₹	189.40
8.58	Providing and fixing oxidised M.S. double acting spring hinges with necessary screws etc. complete.					
8.58.3	100 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08084	M.S. double acting spring hinges (oxidised)	each	10.00	₹ 105.00	₹	1,050.00
	100 mm					
08101	Iron screws (oxidised) 40 mm	100 Nos	80.00	₹ 75.00	₹	60.00
0468	Carriage of materials	tonne	0.003	₹ 110.94	₹	0.33
	Labour-					
0210	Carpenter II class	Day	0.40	₹ 380.00	₹	152.00
0203	Beldar	Day	0.20	₹ 300.00	₹	60.00
	TOTAL				₹	1,322.33
	Add for water charge @ 1 %				₹	13.22
	TOTAL				₹	1,335.55
	Add 3% for sundries & contingencies				₹	40.07
	Total				₹	1,375.62
	Add for contractor's profit and overheads @ 15%				₹	206.34
	Cost of 10 nos.				₹	1,581.96
	Cost of 1 no				₹	158.20
	Say				₹	158.20
8.59	Providing M.S. Piano hinges ISI marked IS : 3818 finished with nickel plating and fixing with necessary screws etc., complete.					
8.59.1	Overall width 35 mm.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 1 meter					
	Materials-					
08085	M.S. piano hinges (oxidised) 35 mm wide	metre	1.00	₹ 62.00	₹	62.00
08104	Iron screws (oxidised) 20 mm	100 Nos	30.00	₹ 45.00	₹	13.50
0468	Carriage of materials	tonne	0.0025	₹ 110.94	₹	0.28
	Labour-					
0210	Carpenter II class	Day	0.14	₹ 380.00	₹	53.20
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	155.98
	Add for water charge @ 1 %				₹	1.56
	TOTAL				₹	157.54
	Add 3% for sundries & contingencies				₹	4.73
	Total				₹	162.27
	Add for contractor's profit and overheads @ 15%				₹	24.34
	Cost for 1 metre				₹	186.61
	Say				₹	186.60
8.59	Providing M.S. Piano hinges ISI marked IS : 3818 finished with nickel plating and fixing with necessary screws etc., complete.					

8.59.2	Overall width 50 mm.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 meter				
	Materials-				
08219	M.S. piano hinges (oxidised) 50 mm wide	metre	1.00	₹ 60.00	₹ 60.00
08104	Iron screws (oxidised) 20 mm	100 Nos	30.00	₹ 45.00	₹ 13.50
0468	Carriage of materials	tonne	0.003	₹ 110.94	₹ 0.33
	Labour-				
0210	Carpenter II class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 154.03
	Add for water charge @ 1 %				₹ 1.54
	TOTAL				₹ 155.57
	Add 3% for sundries & contingencies				₹ 4.67
	Total				₹ 160.24
	Add for contractor's profit and overheads @ 15%				₹ 24.04
	Cost for 1 metre				₹ 184.28
	Say				₹ 184.30
8.59	Providing M.S. Piano hinges ISI marked IS : 3818 finished with nickel plating and fixing with necessary screws etc., complete.				
8.59.3	Overall width 65 mm.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 meter				
	Materials-				
08220	M.S. piano hinges (oxidised) 65 mm wide	metre	1.00	₹ 45.00	₹ 45.00
08104	Iron screws (oxidised) 20 mm	100 Nos	30.00	₹ 45.00	₹ 13.50
0468	Carriage of materials	tonne	0.0035	₹ 110.94	₹ 0.39
	Labour-				
0210	Carpenter II class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 139.09
	Add for water charge @ 1 %				₹ 1.39
	TOTAL				₹ 140.48
	Add 3% for sundries & contingencies				₹ 4.21
	Total				₹ 144.69
	Add for contractor's profit and overheads @ 15%				₹ 21.70
	Cost for 1 metre				₹ 166.39
	Say				₹ 166.40
8.60	Providing and fixing ISI marked oxidised M.S.sliding door bolts with nuts and screws etc. complete				
8.60.1	300×16 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08086	M.S. 'sliding door bolts (oxidised) 300x16 mm	each	10.00	₹ 105.00	₹ 1,050.00
08178	Iron screws (oxidised) 35 mm	100 Nos	120.00	₹ 55.00	₹ 66.00
08070	Bolts and nuts 50 × 6 mm	each	40.00	₹ 10.00	₹ 400.00
	Labour-				

0210	Carpenter II class	Day	0.25	₹ 380.00	₹ 95.00
	TOTAL				₹ 1,611.00
	Add for water charge @ 1 %				₹ 16.11
	TOTAL				₹ 1,627.11
	Add 3% for sundries & contingencies				₹ 48.81
	Total				₹ 1,675.92
	Add for contractor's profit and overheads @ 15%				₹ 251.39
	Cost of 10 nos.				₹ 1,927.31
	Cost of 1 no.				₹ 192.73
	Say				₹ 192.70
8.60	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete :				
8.60.2	250 x 16 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08087	M.S. 'sliding door bolts (oxidised) 250x16 mm	each	10.00	₹ 105.00	₹ 1,050.00
08178	Iron screws (oxidised) 35 mm	100 Nos	100.00	₹ 55.00	₹ 55.00
08070	Bolts and nuts 50x6 mm	each	40.00	₹ 10.00	₹ 400.00
	Labour-				
0210	Carpenter II class	Day	0.25	₹ 380.00	₹ 95.00
	TOTAL				₹ 1,600.00
	Add for water charge @ 1 %				₹ 16.00
	TOTAL				₹ 1,616.00
	Add 3% for sundries & contingencies				₹ 48.48
	Total				₹ 1,664.48
	Add for contractor's profit and overheads @15%				₹ 249.67
	Cost of 10 nos.				₹ 1,914.15
	Cost of 1 no.				₹ 191.42
	Say				₹ 191.40
8.61	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :				
8.61.1	250x10 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08090	M.S. tower bolts (oxidised) 250 x 10 mm	each	10.00	₹ 52.00	₹ 520.00
08102	Iron screws (oxidised) 30 mm	100 Nos	80.00	₹ 56.00	₹ 44.80
	Labour-				
0210	Carpenter II class	Day	0.10	₹ 380.00	₹ 38.00
	TOTAL				₹ 602.80
	Add for water charge @ 1 %				₹ 6.03
	TOTAL				₹ 608.83
	Add 3% for sundries & contingencies				₹ 18.26
	Total				₹ 627.09
	Add for contractor's profit and overheads @15%				₹ 94.06
	Cost of 10 nos.				₹ 721.15
	Cost of 1 no.				₹ 72.12

	Say				₹	72.10
8.61	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :					
8.61.2	200 x 10 mm					
Code	Description	Unit	Quantity	Rate		Rate
	Details of cost for 10 nos.					
	Materials-					
08091	M.S. tower bolts (oxidised) 200 x 10 mm	each	10.00	₹ 45.00	₹	450.00
08102	Iron screws (oxidised) 30 mm	100 Nos	80.00	₹ 56.00	₹	44.80
	Labour-					
0210	Carpenter II class	Day	0.10	₹ 380.00	₹	38.00
	TOTAL				₹	532.80
	Add for water charge @ 1%				₹	5.33
	TOTAL				₹	538.13
	Add 3% for sundries & contingencies				₹	16.14
	Total				₹	554.27
	Add for contractor's profit and overheads @ 15%				₹	83.14
	Cost of 10 nos.				₹	637.41
	Cost of 1 no.				₹	63.74
	Say				₹	63.70
8.61	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :					
8.61.3	150 x 10 mm					
Code	Description	Unit	Quantity	Rate		Rate
	Details of cost for 10 nos.					
	Materials-					
08092	M.S. tower bolts (oxidised) 150 x 10 mm	each	10.00	₹ 40.00	₹	400.00
08102	Iron screws (oxidised) 30 mm	100 Nos	60.00	₹ 56.00	₹	33.60
	Labour-					
0210	Carpenter II class	Day	0.08	₹ 380.00	₹	30.40
	TOTAL				₹	464.00
	Add for water charge @ 1%				₹	4.64
	TOTAL				₹	468.64
	Add 3% for sundries & contingencies				₹	14.06
	Total				₹	482.70
	Add for contractor's profit and overheads @ 15%				₹	72.41
	Cost of 10 nos.				₹	555.11
	Cost of 1 no.				₹	55.51
	Say				₹	55.50
8.61	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :					
8.61.4	100 x 10 mm					
Code	Description	Unit	Quantity	Rate		Rate
	Details of cost for 10 nos.					
	Materials-					
08093	M.S. tower bolts (oxidised) 100 x 10 mm	each	10.00	₹ 34.00	₹	340.00
08102	Iron screws (oxidised) 30 mm	100 Nos	60.00	₹ 56.00	₹	33.60

	Labour-				
0210	Carpenter II class	Day	0.08	₹ 380.00	₹ 30.40
	TOTAL				₹ 404.00
	Add for water charge @ 1 %				₹ 4.04
	TOTAL				₹ 408.04
	Add 3% for sundries & contingencies				₹ 12.24
	Total				₹ 420.28
	Add for contractor's profit and overheads @ 15%				₹ 63.04
	Cost of 10 nos.				₹ 483.32
	Cost of 1 no.				₹ 48.33
	Say				₹ 48.30
8.62	Providing and fixing ISI marked 85 x 42 mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08149	M.S. pull bolts (oxidised) of size 85 x 42 mm	each	10.00	₹ 60.00	₹ 600.00
	with bolts and nuts complete				
	Labour-				
0210	Carpenter II class	Day	0.25	₹ 380.00	₹ 95.00
	TOTAL				₹ 695.00
	Add for water charge @ 1 %				₹ 6.95
	TOTAL				₹ 701.95
	Add 3% for sundries & contingencies				₹ 21.06
	Total				₹ 723.01
	Add for contractor's profit and overheads @ 15%				₹ 108.45
	Cost of 10 nos.				₹ 831.46
	Cost of 1 no.				₹ 83.15
	Say				₹ 83.20
8.63	Providing and fixing ISI marked oxidised M.S. door latches conforming to IS:5930 with screws etc. complete :				
8.63.1	300 x 20 x 6 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08088	M.S. door latches (oxidised) 300 x 20 x 6 mm	each	10.00	₹ 60.00	₹ 600.00
08103	Iron screws (oxidised) 25 mm	100 Nos	90.00	₹ 56.00	₹ 50.40
	Labour-				
0210	Carpenter II class	Day	0.12	₹ 380.00	₹ 45.60
	TOTAL				₹ 696.00
	Add for water charge @ 1 %				₹ 6.96
	TOTAL				₹ 702.96
	Add 3% for sundries & contingencies				₹ 21.09
	Total				₹ 724.05
	Add for contractor's profit and overheads @ 15%				₹ 108.61
	Cost of 10 nos.				₹ 832.66
	Cost of 1 no.				₹ 83.27
	Say				₹ 83.30

8.63	Providing and fixing ISI marked oxidised M.S. door latches conforming to IS:5930 with screws etc. complete :				
8.63.2	250 x 20 x 6 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08089	M.S. door latches (oxidised) 250 x 20 x 6 mm	each	10.00	₹ 48.00	₹ 480.00
08103	Iron screws (oxidised) 25 mm	100 Nos	90.00	₹ 56.00	₹ 50.40
	Labour-				
0210	Carpenter II class	Day	0.12	₹ 380.00	₹ 45.60
	TOTAL				₹ 576.00
	Add for water charge @ 1 %				₹ 5.76
	TOTAL				₹ 581.76
	Add 3% for sundries & contingencies				₹ 17.45
	Total				₹ 599.21
	Add for contractor's profit and overheads @ 15%				₹ 89.88
	Cost of 10 nos.				₹ 689.09
	Cost of 1 no.				₹ 68.91
	Say				₹ 68.90
8.64	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :				
8.64.1	125 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08094	M.S. handle (oxidised) 125 mm	each	10.00	₹ 20.00	₹ 200.00
08103	Iron screws (oxidised) 25 mm	100 Nos	40.00	₹ 56.00	₹ 22.40
	Labour-				
0210	Carpenter II class	Day	0.06	₹ 380.00	₹ 22.80
	TOTAL				₹ 245.20
	Add for water charge @ 1 %				₹ 2.45
	TOTAL				₹ 247.65
	Add 3% for sundries & contingencies				₹ 7.43
	Total				₹ 255.08
	Add for contractor's profit and overheads @ 15%				₹ 38.26
	Cost of 10 nos.				₹ 293.34
	Cost of 1 no.				₹ 29.33
	Say				₹ 29.30
8.64	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete:				
8.64.2	100 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08095	M.S. handle (oxidised) 100 mm	each	10.00	₹ 15.00	₹ 150.00
08103	Iron screws (oxidised) 25 mm	100 Nos	40.00	₹ 56.00	₹ 22.40
	Labour-				
0210	Carpenter II class	Day	0.06	₹ 380.00	₹ 22.80
	TOTAL				₹ 195.20
	Add for water charge @ 1 %				₹ 1.95

	TOTAL				₹	197.15
	Add 3% for sundries & contingencies				₹	5.91
	Total				₹	203.06
	Add for contractor's profit and overheads @ 15%				₹	30.46
	Cost of 10 nos.				₹	233.52
	Cost of 1 no.				₹	23.35
	Say				₹	23.40
8.64	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :					
8.64.3	75 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08096	M.S. handle (oxidised) 75 mm	each	10.00	₹ 12.00	₹	120.00
08103	Iron screws (oxidised) 25 mm	100 Nos	40.00	₹ 56.00	₹	22.40
	Labour-					
0210	Carpenter II class	Day	0.06	₹ 380.00	₹	22.80
	TOTAL				₹	165.20
	Add for water charge @ 1%				₹	1.65
	TOTAL				₹	166.85
	Add 3% for sundries & contingencies				₹	5.01
	Total				₹	171.86
	Add for contractor's profit and overheads @ 15%				₹	25.78
	Cost of 10 nos.				₹	197.64
	Cost of 1 no.				₹	19.76
	Say				₹	19.80
8.65	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete :					
8.65.1	150 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08097	M.S. hasp and staple (safety type) (oxidised)	10 Nos	10.00	₹ 140.00	₹	140.00
	150 mm					
08103	Iron screws (oxidised) 25 mm	100 Nos	80.00	₹ 56.00	₹	44.80
	Labour-					
0210	Carpenter II class	Day	0.08	₹ 380.00	₹	30.40
	TOTAL				₹	215.20
	Add for water charge @ 1 %				₹	2.15
	TOTAL				₹	217.35
	Add 3% for sundries & contingencies				₹	6.52
	Total				₹	223.87
	Add for contractor's profit and overheads @ 15%				₹	33.58
	Cost of 10 nos.				₹	257.45
	Cost of 1 no.				₹	25.75
	Say				₹	25.80
8.65	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete :					
8.65.2	115 mm					

Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08098	M.S. hasp and staple (safety type) (oxidised) 115 mm	10 Nos	10.00	₹ 120.00	₹ 120.00
08103	Iron screws (oxidised) 25 mm	100 Nos	70.00	₹ 56.00	₹ 39.20
	Labour-				
0210	Carpenter II class	Day	0.08	₹ 380.00	₹ 30.40
	TOTAL				₹ 189.60
	Add for water charge @ 1 %				₹ 1.90
	TOTAL				₹ 191.50
	Add 3% for sundries & contingencies				₹ 5.75
	Total				₹ 197.25
	Add for contractor's profit and overheads @ 15%				₹ 29.59
	Cost of 10 nos.				₹ 226.84
	Cost of 1 no.				₹ 22.68
	Say				₹ 22.70
8.65	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete :				
8.65.3	90 mm				
	Details of cost for 10 nos.				
	Materials-				
08099	M.S. hasp and staple (safety type) (oxidised) 90 mm	10 Nos	10.00	₹ 90.00	₹ 90.00
08103	Iron screws (oxidised) 25 mm	100 Nos	70.00	₹ 56.00	₹ 39.20
	Labour-				
0210	Carpenter II class	Day	0.08	₹ 380.00	₹ 30.40
	TOTAL				₹ 159.60
	Add for water charge @ 1%				₹ 1.60
	TOTAL				₹ 161.20
	Add 3% for sundries & contingencies				₹ 4.84
	Total				₹ 166.04
	Add for contractor's profit and overheads @ 15%				₹ 24.91
	Cost of 10 nos.				₹ 190.95
	Cost of 1 no.				₹ 19.10
	Say				₹ 19.10
8.66	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.				
8.66.1	300 mm weighing not less than 200 gms.				
	Details of cost for 10 nos.				
	Materials-				
08186	Oxidised M.S. casement stay 300 mm	each	10.00	₹ 34.00	₹ 340.00
08102	Screws 30 mm	100 Nos	40.00	₹ 56.00	₹ 22.40
	Labour-				

0210	Carpenter II class	Day	0.10	₹ 380.00	₹ 38.00
	TOTAL				₹ 400.40
	Add for water charge @ 1 %				₹ 4.00
	TOTAL				₹ 404.40
	Add 3% for sundries & contingencies				₹ 12.13
	Total				₹ 416.53
	Add for contractor's profit and overheads @ 15%				₹ 62.48
	Cost of 10 nos.				₹ 479.01
	Cost of 1 no.				₹ 47.90
	Say				₹ 47.90
8.66	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.				
8.66.2	250 mm weighing not less than 150 gms.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08187	Oxidised M.S. casement stay 250 mm	each	10.00	₹ 30.00	₹ 300.00
08103	Screws 25 mm	100 Nos	40.00	₹ 56.00	₹ 22.40
	Labour-				
0210	Carpenter II class	Day	0.10	₹ 380.00	₹ 38.00
	TOTAL				₹ 360.40
	Add for water charge @ 1 %				₹ 3.60
	TOTAL				₹ 364.00
	Add 3% for sundries & contingencies				₹ 10.92
	Total				₹ 374.92
	Add for contractor's profit and overheads @ 15%				₹ 56.24
	Cost of 10 nos.				₹ 431.16
	Cost of 1 no.				₹ 43.12
	Say				₹ 43.10
8.66	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.				
8.66.3	200 mm weighing not less than 120 gms.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08188	Oxidised M.S. casement stay 200 mm	each	10.00	₹ 25.00	₹ 250.00
08103	Screws 25 mm	100 Nos	40.00	₹ 56.00	₹ 22.40
	Labour-				
0210	Carpenter II class	Day	0.10	₹ 380.00	₹ 38.00
	TOTAL				₹ 310.40
	Add for water charge @ 1 %				₹ 3.10
	TOTAL				₹ 313.50
	Add 3% for sundries & contingencies				₹ 9.41
	Total				₹ 322.91
	Add for contractor's profit and overheads @ 15%				₹ 48.44

	Cost of 10 nos.				₹	371.35
	Cost of 1 no.				₹	37.14
	Say				₹	37.10
8.67	Providing and fixing oxidised M.S. Safety chain with necessary fixtures for doors. (Weighing not less than 450 gms.)					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08196	Oxidised M.S. safety chain	each	10.00	₹ 62.00	₹	620.00
08103	Iron screws 25 mm	100 Nos	60.00	₹ 56.00	₹	33.60
	Labour-					
0210	Carpenter II class	Day	0.10	₹ 380.00	₹	38.00
	TOTAL				₹	691.60
	Add for water charge @ 1 %				₹	6.92
	TOTAL				₹	698.52
	Add 3% for sundries & contingencies				₹	20.96
	Total				₹	719.48
	Add for contractor's profit and overheads @ 15%				₹	107.92
	Cost of 10 nos.				₹	827.40
	Cost of 1 no.				₹	82.74
	Say				₹	82.70
8.68	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :					
8.68.1	125 x 64 x 1.90 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 Nos					
	Materials-					
08243	S.S. butt hinges 125 x 64 x 1.9 mm	10 Nos	10.00	₹ 360.00	₹	360.00
08239	Stainless steel screws 50 mm	100 Nos	80.00	₹ 275.00	₹	220.00
	Labour-					
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹	53.20
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	660.20
	Add for water charge @ 1%				₹	6.60
	TOTAL				₹	666.80
	Add 3% for sundries & contingencies				₹	20.00
	Total				₹	686.80
	Add for contractor's profit and overheads @ 15%				₹	103.02
	Cost of 10 hinges				₹	789.82
	Cost of 1 butt hinge				₹	78.98
	Say				₹	79.00
8.68	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :					
8.68.2	100 X 58 X 1.90 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 Nos					
	Materials-					
08244	S.S. butt hinges 100 x 58 x 1.9 mm	10 Nos	10.00	₹ 250.00	₹	250.00

08240	Stainless steel screws 40 mm	100 Nos	80.0	₹	215.00	₹	172.00
	Labour-						
0210	Carpenter 2nd class	Day	0.14	₹	380.00	₹	53.20
0203	Beldar	Day	0.09	₹	300.00	₹	27.00
	TOTAL					₹	502.20
	Add for water charge @ 1 %					₹	5.02
	TOTAL					₹	507.22
	Add 3% for sundries & contingencies					₹	15.22
	Total					₹	522.44
	Add for contractor's profit and overheads @ 15%					₹	78.37
	Cost of 10 hinges					₹	600.81
	Cost of 1 butt hinge					₹	60.08
	Say					₹	60.10
9.68	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :						
9.68.3	75 x 47 x 1.80 mm						
Code	Description	Unit	Quantity		Rate		Rate
	Details of cost for 10 Nos						
	Materials-						
08245	S.S. butt hinges 75 x 47 x 1.8 mm	10 Nos	10.00	₹	200.00	₹	200.00
08241	Stainless steel screws 30 mm	100 Nos	60.00	₹	150.00	₹	90.00
	Labour-						
0210	Carpenter 2nd class	Day	0.14	₹	380.00	₹	53.20
0203	Beldar	Day	0.09	₹	300.00	₹	27.00
	TOTAL					₹	370.20
	Add for water charge @ 1 %					₹	3.70
	TOTAL					₹	373.90
	Add 3% for sundries & contingencies					₹	11.22
	Total					₹	385.12
	Add for contractor's profit and overheads @ 15%					₹	57.77
	Cost of 10 hinges					₹	442.89
	Cost of 1 butt hinge					₹	44.29
	Say					₹	44.30
8.68	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :						
8.68.4	50 x 37 x 1.50 mm						
Code	Description	Unit	Quantity		Rate		Rate
	Details of cost for 10 Nos						
	Materials-						
08246	S.S. butt hinges 50 x 37 x 1.5 mm	10 Nos	10.00	₹	150.00	₹	150.00
08242	Stainless steel screws 20 mm	100 Nos	40.00	₹	120.00	₹	48.00
	Labour-						
0210	Carpenter 2nd class	Day	0.08	₹	380.00	₹	30.40
	TOTAL					₹	228.40
	Add for water charge @ 1%					₹	2.28
	TOTAL					₹	230.68
	Add 3% for sundries & contingencies					₹	6.92
	Total					₹	237.60

	Add for contractor's profit and overheads @ 15%				₹	35.64
	Cost of 10 hinges				₹	273.24
	Cost of 1 butt hinge				₹	27.32
	Say				₹	27.30
8.69	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :					
8.69.1	125 x 64 x 2.50 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 Nos					
	Materials-					
08247	S.S. butt hinges 125 x 64 x 2.5 mm	10 Nos	10.00	₹ 400.00	₹	400.00
08239	Stainless steel screws 50 mm	100 Nos	80.00	₹ 275.00	₹	220.00
	Labour-					
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹	53.20
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	700.20
	Add for water charge @ 1%				₹	7.00
	TOTAL				₹	707.20
	Add 3% for sundries & contingencies				₹	21.22
	Total				₹	728.42
	Add for contractor's profit and overheads @ 15%				₹	109.26
	Cost of 10 hinges				₹	837.68
	Cost of 1 butt hinge				₹	83.77
	Say				₹	83.80
8.69	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :					
8.69.2	100 x 60 x 2.50 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 Nos					
	Material					
08248	S.S. butt hinges 100 x 60 x 2.5 mm	10 Nos	10.00	₹ 270.00	₹	270.00
08240	Stainless steel screws 40 mm	100 Nos	80.00	₹ 215.00	₹	172.00
	Labour-					
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹	53.20
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	522.20
	Add for water charge @ 1 %				₹	5.22
	TOTAL				₹	527.42
	Add 3% for sundries & contingencies				₹	15.82
	Total				₹	543.24
	Add for contractor's profit and overheads @ 15%				₹	81.49
	Cost of 10 hinges				₹	624.73
	Cost of 1 butt hinge				₹	62.47
	Say				₹	62.50
8.69	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :					
8.69.3	75 x 50 x 2.50 mm					

Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 Nos				
	Materials-				
08249	S.S. butt hinges 75 x 50 x 2.5 mm	10 Nos	10.00	₹ 230.00	₹ 230.00
08241	Stainless steel screws 30 mm	100 Nos	60.00	₹ 150.00	₹ 90.00
	Labour-				
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 400.20
	Add for water charge @ 1%				₹ 4.00
	TOTAL				₹ 404.20
	Add 3% for sundries & contingencies				₹ 12.13
	Total				₹ 416.33
	Add for contractor's profit and overheads @ 15%				₹ 62.45
	Cost of 10 hinges				₹ 478.78
	Cost of 1 butt hinge				₹ 47.88
	Say				₹ 47.90
8.70	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :				
8.70.1	125 x 85 x 5.5 mm (heavy type)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08010	Brass butt hinges 125 x 85 x 5.5 mm	10 Nos	10.00	₹ 1,500.00	₹ 1,500.00
08037	Brass screws 50 mm	100 Nos	100.00	₹ 107.00	₹ 107.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	TOTAL				₹ 1,696.50
	Add for water charge @ 1 %				₹ 16.97
	TOTAL				₹ 1,713.47
	Add 3% for sundries & contingencies				₹ 51.40
	Total				₹ 1,764.87
	Add for contractor's profit and overheads @ 15%				₹ 264.73
	Cost for 10 nos.				₹ 2,029.60
	Cost of 1 no.				₹ 202.96
	Say				₹ 203.00
8.70	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :				
8.70.2	125 x 70 x 4 mm (ordinary type)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08006	Brass butt hinges 125 x 70 x 4 mm	10 Nos	10.00	₹ 870.00	₹ 870.00
08037	Brass screws 50 mm	100 Nos	100.00	₹ 230.00	₹ 230.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50

0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	TOTAL				₹ 1,189.50
	Add for water charge @ 1%				₹ 11.90
	TOTAL				₹ 1,201.40
	Add 3% for sundries & contingencies				₹ 36.04
	Total				₹ 1,237.44
	Add for contractor's profit and overheads @ 15%				₹ 185.62
	Cost for 10 nos.				₹ 1,423.06
	Cost of 1 no.				₹ 142.31
	Say				₹ 142.30
8.70	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :				
8.70.3	100 x 85 x 5.5 mm (heavy type)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08011	Brass butt hinges 100 x 85 x 5.5 mm	10 Nos	10.00	₹ 2,885.00	₹ 2,885.00
08038	Brass screws 40 mm	100 Nos	80.00	₹ 175.00	₹ 140.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	TOTAL				₹ 3,114.50
	Add for water charge @ 1 %				₹ 31.15
	TOTAL				₹ 3,145.65
	Add 3% for sundries & contingencies				₹ 94.37
	Total				₹ 3,240.02
	Add for contractor's profit and overheads @ 15%				₹ 486.00
	Cost for 10 nos.				₹ 3,726.02
	Cost of 1 no.				₹ 372.60
	Say				₹ 372.60
8.70	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :				
8.70.4	100 x 70 x 4 mm (ordinary type)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08007	Brass butt hinges 100 x 70 x 4 mm	10 Nos	10.00	₹ 725.00	₹ 725.00
08038	Brass screws 40 mm	100 Nos	80.00	₹ 175.00	₹ 140.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	TOTAL				₹ 954.50
	Add for water charge @ 1%				₹ 9.55
	TOTAL				₹ 964.05
	Add 3% for sundries & contingencies				₹ 28.92
	Total				₹ 992.97
	Add for contractor's profit and overheads @ 15%				₹ 148.95
	Cost for 10 nos.				₹ 1,141.92

	Cost of 1 no.				₹ 114.19
	Say				₹ 114.20
8.70	Providing and fixing bright finished brass butt hinges with necessary screws etc.complete :				
8.70.5	75 x 65 x4 mm (heavy type)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08012	Brass butt hinges 75 x 65 x 4 mm	10 Nos	10.00	₹ 1,045.00	₹ 1,045.00
08039	Brass screws 30 mm	100 Nos	60.00	₹ 145.00	₹ 87.00
	Labour-				
0209	Carpenter 1st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	TOTAL				₹ 1,221.50
	Add for water charge @ 1%				₹ 12.22
	TOTAL				₹ 1,233.72
	Add 3% for sundries & contingencies				₹ 37.01
	Total				₹ 1,270.73
	Add for contractor's profit and overheads @ 15%				₹ 190.61
	Cost for 10 nos.				₹ 1,461.34
	Cost of 1 no.				₹ 146.13
	Say				₹ 146.10
8.70	Providing and fixing bright finished brass butthingses with necessaryscrews etc. complete :				
8.70.6	75 x 40 x 2.5 mm (ordinary type)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08008	Brass butt hinges 75 x 40 x 2.5 mm	10 Nos	10.00	₹ 455.00	₹ 455.00
08039	Brass screws 30 mm	100 Nos	60.00	₹ 145.00	₹ 87.00
	Labour-				
0209	Carpenter 1st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	TOTAL				₹ 631.50
	Add for water charge @ 1%				₹ 6.32
	TOTAL				₹ 637.82
	Add 3% for sundries & contingencies				₹ 19.13
	Total				₹ 656.95
	Add for contractor's profit and overheads @ 15%				₹ 98.54
	Cost for 10 nos.				₹ 755.49
	Cost of 1 no.				₹ 75.55
	Say				₹ 75.60
8.70	Providing and fixing bright finished brass butt hinges with necessary screws etc.complete :				
8.70.7	50 x 40 x 2.5 mm (ordinary type)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				

08009	Brass butt hinges 50 x 40 x 2.5 mm	10 Nos	10.00	₹ 208.00	₹ 208.00
08041	Brass screws 20 mm	100 Nos	40.00	₹ 102.00	₹ 40.80
	Labour-				
0209	Carpenter 1st class	Day	0.08	₹ 425.00	₹ 34.00
	TOTAL				₹ 282.80
	Add for water charge @ 1 %				₹ 2.83
	TOTAL				₹ 285.63
	Add 3% for sundries & contingencies				₹ 8.57
	Total				₹ 294.20
	Add for contractor's profit and overheads @ 15%				₹ 44.13
	Cost for 10 nos.				₹ 338.33
	Cost of 1 no.				₹ 33.83
	Say				₹ 33.80
8.71	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete :				
8.71.1	150 x 125 x 27 x 5 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08013	Parliamentary hinges 150 x 125 x 27 x 5 mm	10 Nos	10.00	₹ 3,010.00	₹ 3,010.00
08038	Brass screws 40 mm	100 Nos	80.00	₹ 175.00	₹ 140.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.14	₹ 300.00	₹ 42.00
	TOTAL				₹ 3,251.50
	Add for water charge @ 1%				₹ 32.52
	TOTAL				₹ 3,284.02
	Add 3% for sundries & contingencies				₹ 98.52
	Total				₹ 3,382.54
	Add for contractor's profit and overheads @ 15%				₹ 507.38
	Cost of 10 hinges				₹ 3,889.92
	Cost of 1 hinge				₹ 388.99
	Say				₹ 389.00
8.71	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete :				
8.71.2	125 x 125 x 27 x 5 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08014	Parliamentary hinges 125 x 125 x 27 x 5 mm	10 Nos	10.00	₹ 2,685.00	₹ 2,685.00
08038	Brass screws 40 mm	100 Nos	80.00	₹ 175.00	₹ 140.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.14	₹ 300.00	₹ 42.00
	TOTAL				₹ 2,926.50
	Add for water charge @ 1%				₹ 29.27
	TOTAL				₹ 2,955.77

	Add 3% for sundries & contingencies				₹	88.67
	Total				₹	3,044.44
	Add for contractor's profit and overheads @ 15%				₹	456.67
	Cost of 10 hinges				₹	3,501.11
	Cost of 1 hinge				₹	350.11
	Say				₹	350.10
8.71	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete :					
8.71.3	100 x 125 x 27 x 5 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08015	Parliamentary hinges 100 x 125 x 27 x 5 mm	10 Nos	10.00	₹ 2,475.00	₹	2,475.00
08038	Brass screws 40 mm	100 Nos	80.00	₹ 175.00	₹	140.00
	Labour-					
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹	59.50
0203	Beldar	Day	0.14	₹ 300.00	₹	42.00
	TOTAL				₹	2,716.50
	Add for water charge @ 1 %				₹	27.17
	TOTAL				₹	2,743.67
	Add 3% for sundries & contingencies				₹	82.31
	Total				₹	2,825.98
	Add for contractor's profit and overheads @15%				₹	423.90
	Cost of 10 hinges				₹	3,249.88
	Cost of 1 hinge				₹	324.99
	Say				₹	325.00
8.71	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete :					
8.71.4	75 x 100 x 20 x 3.2 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08016	Parliamentary hinges 75 x 100 x 20 x 3.2 mm	10 Nos	10.00	₹ 1,845.00	₹	1,845.00
08039	Brass screws 30 mm	100 Nos	60.00	₹ 145.00	₹	87.00
	Labour-					
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹	59.50
0203	Beldar	Day	0.14	₹ 300.00	₹	42.00
	TOTAL				₹	2,033.50
	Add for water charge @ 1 %				₹	20.34
	TOTAL				₹	2,053.84
	Add 3% for sundries & contingencies				₹	61.62
	Total				₹	2,115.46
	Add for contractor's profit and overheads @ 15%				₹	317.32
	Cost of 10 hinges				₹	2,432.78
	Cost of 1 hinge				₹	243.28
	Say				₹	243.30

8.72	Providing and fixing bright finished brass towerbolts (barrel type)with necessary screws etc. complete :				
8.72.1	250 x 10 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08017	Brass barrel bolts 250 x 10 mm	each	10.00	₹ 245.00	₹ 2,450.00
08039	Brass screws 30 mm	100 Nos	100.00	₹ 145.00	₹ 145.00
	Labour-				
0209	Carpenter 1st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 2,637.50
	Add for water charge @ 1%				₹ 26.38
	TOTAL				₹ 2,663.88
	Add 3% for sundries & contingencies				₹ 79.92
	Total				₹ 2,743.80
	Add for contractor's profit and overheads@ 15%				₹ 411.57
	Cost of 10 tower bolts				₹ 3,155.37
	Cost of 1 tower bolt				₹ 315.54
	Say				₹ 315.50
8.72	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
8.72.2	200x10 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08018	Brass barrel bolts 200x10 mm	each	10.00	₹ 195.00	₹ 1,950.00
08039	Brass screws 30 mm	100 Nos	80.00	₹ 145.00	₹ 116.00
	Labour-				
0209	Carpenter 1 st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 2,108.50
	Add for water charge @ 1 %				₹ 21.09
	TOTAL				₹ 2,129.59
	Add 3% for sundries & contingencies				₹ 63.89
	Total				₹ 2,193.48
	Add for contractor's profit and overheads @ 15%				₹ 329.02
	Cost of 10 tower bolts				₹ 2,522.50
	Cost of 1 tower bolt				₹ 252.25
	Say				₹ 252.30
8.72	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
8.72.3	150x10 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08019	Brass barrel bolts 150x10 mm	each	10.00	₹ 155.00	₹ 1,550.00
08039	Brass screws 30 mm	100 Nos	80.00	₹ 145.00	₹ 116.00
	Labour-				
0209	Carpenter 1 st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 1,708.50
	Add for water charge @ 1 %				₹ 17.09

	TOTAL				₹	1,725.59
	Add 3% for sundries & contingencies				₹	51.77
	Total				₹	1,777.36
	Add for contractor's profit and overheads @ 15%				₹	266.60
	Cost of 10 tower bolts				₹	2,043.96
	Cost of 1 tower bolt				₹	204.40
	Say				₹	204.40
8.72	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :					
8.72.4	100x10 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08020	Brass barrel bolts 100x10 mm	each	10.00	₹ 102.00	₹	1,020.00
08039	Brass screws 30 mm	100 Nos	60.00	₹ 145.00	₹	87.00
	Labour-					
0209	Carpenter 1 st class	Day	0.10	₹ 425.00	₹	42.50
	TOTAL				₹	1,149.50
	Add for water charge @ 1%				₹	11.50
	TOTAL				₹	1,161.00
	Add 3% for sundries & contingencies				₹	34.83
	Total				₹	1,195.83
	Add for contractor's profit and overheads @ 15%				₹	179.37
	Cost of 10 tower bolts				₹	1,375.20
	Cost of 1 tower bolt				₹	137.52
	Say				₹	137.50
8.73	Providing and fixing bright finished brass door latch with necessary screws etc. complete :					
8.73.1	300x16x5 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08024	Brass door latch 300x16x5 mm	each	10.00	₹ 187.00	₹	1,870.00
08040	Brass screws 25 mm	100 Nos	90.00	₹ 105.00	₹	94.50
	Labour-					
0209	Carpenter 1 st class	Day	0.12	₹ 425.00	₹	51.00
	TOTAL				₹	2,015.50
	Add for water charge @ 1 %				₹	20.16
	TOTAL				₹	2,035.66
	Add 3% for sundries & contingencies				₹	61.07
	Total				₹	2,096.73
	Add for contractor's profit and overheads @ 15%				₹	314.51
	Cost of 10 nos.				₹	2,411.24
	Cost of 1 no.				₹	241.12
	Say				₹	241.10
8.73	Providing and fixing bright finished brass door latch with necessary screws etc. complete :					
8.73.2	250x16x5 mm					

Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08025	Brass door latch 250x16x5 mm	each	10.00	₹ 178.00	₹ 1,780.00
08040	Brass screws 25 mm	100 Nos	90.00	₹ 105.00	₹ 94.50
	Labour-				
0209	Carpenter 1st class	Day	0.12	₹ 425.00	₹ 51.00
	TOTAL				₹ 1,925.50
	Add for water charge @ 1 %				₹ 19.26
	TOTAL				₹ 1,944.76
	Add 3% for sundries & contingencies				₹ 58.34
	Total				₹ 2,003.10
	Add for contractor's profit and overheads @ 15%				₹ 300.47
	Cost of 10 nos.				₹ 2,303.57
	Cost of 1 no.				₹ 230.36
	Say				₹ 230.40
8.74	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08026	100 mm mortice latch & lock with 6 levers	each	1.00	₹ 400.00	₹ 400.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 472.25
	Add for water charge @ 1 %				₹ 4.72
	TOTAL				₹ 476.97
	Add 3% for sundries & contingencies				₹ 14.31
	Total				₹ 491.28
	Add for contractor's profit and overheads @ 15%				₹ 73.69
	Cost of 1 mortice latch and lock				₹ 564.97
	Say				₹ 565.00
8.75	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles with necessary screws etc. complete (best make of approved quality).				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08027	100 mm mortice latch	each	1.00	₹ 345.00	₹ 345.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 417.25
	Add for water charge @ 1 %				₹ 4.17
	TOTAL				₹ 421.42
	Add 3% for sundries & contingencies				₹ 12.64
	Total				₹ 434.06
	Add for contractor's profit and overheads @ 15%				₹ 65.11
	Cost of 1 mortice latch and lock				₹ 499.17

	Say				₹ 499.20
8.76	Providing and fixing bright finished brass night latch including necessary screws etc. complete (best make of approved quality).				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08035	Brass night latch	each	1.00	₹ 504.00	₹ 504.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 576.25
	Add for water charge @ 1 %				₹ 5.76
	TOTAL				₹ 582.01
	Add 3% for sundries & contingencies				₹ 17.46
	Total				₹ 599.47
	Add for contractor's profit and overheads @ 15%				₹ 89.92
	Cost of 1 mortice latch and lock				₹ 689.39
	Say				₹ 689.40
8.77	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers including necessary screws etc. complete (best make of approved quality):				
8.77.1	40 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08150	40 mm lock	each	1.00	₹ 75.00	₹ 75.00
	Labour-				
0209	Carpenter 1 st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 147.25
	Add for water charge @ 1 %				₹ 1.47
	TOTAL				₹ 148.72
	Add 3% for sundries & contingencies				₹ 4.46
	Total				₹ 153.18
	Add for contractor's profit and overheads @ 15%				₹ 22.98
	Cost of 1 mortice latch and lock				₹ 176.16
	Say				₹ 176.20
8.77	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers including necessary screws etc. complete (best make of approved quality):				
8.77.2	50 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08151	50 mm lock	each	1.00	₹ 85.00	₹ 85.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 157.25
	Add for water charge @ 1 %				₹ 1.57
	TOTAL				₹ 158.82
	Add 3% for sundries & contingencies				₹ 4.76
	Total				₹ 163.58

	Add for contractor's profit and overheads @ 15%				₹ 24.54
	Cost of 1 mortice latch and lock				₹ 188.12
	Say				₹ 188.10
8.77	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers including necessary screws etc. complete (best make of approved quality):				
8.77.3	65 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08152	65 mm lock	each	1.00	₹ 90.00	₹ 90.00
	Labour-				
0209	Carpenter 1 st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 162.25
	Add for water charge @ 1%				₹ 1.62
	TOTAL				₹ 163.87
	Add 3% for sundries & contingencies				₹ 4.92
	Total				₹ 168.79
	Add for contractor's profit and overheads @ 15%				₹ 25.32
	Cost of 1 mortice latch and lock				₹ 194.11
	Say				₹ 194.10
8.77	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers including necessary screws etc. complete (best make of approved quality):				
8.77.4	75 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08153	75 mm lock	each	1.00	₹ 110.00	₹ 110.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 182.25
	Add for water charge @ 1 %				₹ 1.82
	TOTAL				₹ 184.07
	Add 3% for sundries & contingencies				₹ 5.52
	Total				₹ 189.59
	Add for contractor's profit and overheads @ 15%				₹ 28.44
	Cost of 1 mortice latch and lock				₹ 218.03
	Say				₹ 218.00
8.78	Providing and fixing 50 mm bright finished brass cup board or wardrobe knob with necessary screws (best make of approved quality)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08036	Cupboard knob	each	10.00	₹ 40.00	₹ 400.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
	TOTAL				₹ 459.50
	Add for water charge @ 1%				₹ 4.60
	TOTAL				₹ 464.10

	Add 3% for sundries & contingencies				₹	13.92
	Total				₹	478.02
	Add for contractor's profit and overheads @ 15%				₹	71.70
	Cost of 10 cupboard knob				₹	549.72
	Cost of 1 cupboard knob				₹	54.97
	Say				₹	55.00
8.79	Providing and fixing bright finished brass handles with screws etc. complete :					
8.79.1	125 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08021	Bright finished brass handles 125 mm	each	10.00	₹ 155.00	₹	1,550.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹	42.00
	Labour-					
0209	Carpenter 1 st class	Day	0.06	₹ 425.00	₹	25.50
	TOTAL				₹	1,617.50
	Add for water charge @ 1 %				₹	16.18
	TOTAL				₹	1,633.68
	Add 3% for sundries & contingencies				₹	49.01
	Total				₹	1,682.69
	Add for contractor's profit and overheads @15%				₹	252.40
	Cost of 10 handles				₹	1,935.09
	Cost of 1 handle				₹	193.51
	Say				₹	193.50
8.79	Providing and fixing bright finished brass handles with screws etc. complete :					
8.79.2	100 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08022	Bright finished brass handles 100 mm	each	10.00	₹ 143.00	₹	1,430.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹	42.00
	Labour-					
0209	Carpenter 1st class	Day	0.06	₹ 425.00	₹	25.50
	TOTAL				₹	1,497.50
	Add for water charge @ 1 %				₹	14.98
	TOTAL				₹	1,512.48
	Add 3% for sundries & contingencies				₹	45.37
	Total				₹	1,557.85
	Add for contractor's profit and overheads @ 15%				₹	233.68
	Cost of 10 handles				₹	1,791.53
	Cost of 1 handle				₹	179.15
	Say				₹	179.20
8.79	Providing and fixing bright finished brass handles with screws etc. complete :					
8.79.3	75 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					

	Materials-				
08023	Bright finished brass handles 75 mm	each	10.00	₹ 115.00	₹ 1,150.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹ 42.00
	Labour-				
0209	Carpenter 1 st class	Day	0.06	₹ 425.00	₹ 25.50
	TOTAL				₹ 1,217.50
	Add for water charge @ 1 %				₹ 12.18
	TOTAL				₹ 1,229.68
	Add 3% for sundries & contingencies				₹ 36.89
	Total				₹ 1,266.57
	Add for contractor's profit and overheads @ 15%				₹ 189.99
	Cost of 10 handles				₹ 1,456.56
	Cost of 1 handle				₹ 145.66
	Say				₹ 145.70
8.80	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 hanging floor door stopper				
	Materials-				
08154	Bright finished brass floor door stopper	each	10.00	₹ 78.00	₹ 780.00
08040	Brass screws 25 mm	100 Nos	20.00	₹ 105.00	₹ 21.00
	Labour-				
0209	Carpenter 1st class	Day	0.03	₹ 425.00	₹ 12.75
	TOTAL				₹ 813.75
	Add for water charge @ 1%				₹ 8.14
	TOTAL				₹ 821.89
	Add 3% for sundries & contingencies				₹ 24.66
	Total				₹ 846.55
	Add for contractor's profit and overheads @ 15%				₹ 126.98
	Cost of 10 floor door stoppers				₹ 973.53
	Cost of 1 floor door stopper				₹ 97.35
	Say				₹ 97.40
8.81	Providing and fixing IS : 3564 marked Aluminium die cast body tubular type universal hydraulic door closer with necessary accessories and screws etc. complete.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08155	Hydraulic door closer with necessary accessories	each	10.00	₹ 625.00	₹ 6,250.00
08039	Brass screws 30 mm	100 Nos	60.00	₹ 145.00	₹ 87.00
	Labour-				
0210	Carpenter 2nd class	Day	1.00	₹ 380.00	₹ 380.00
	TOTAL				₹ 6,717.00
	Add for water charge @ 1 %				₹ 67.17
	TOTAL				₹ 6,784.17
	Add 3% for sundries & contingencies				₹ 203.53

	Total				₹	6,987.70
	Add for contractor's profit and overheads @ 15%				₹	1,048.16
	Cost of 10 floor door closers				₹	8,035.86
	Cost of 1 floor door closer				₹	803.59
	Say				₹	803.60
8.82	Providing and fixing IS : 3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws etc. complete.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08185	Hydraulic door closer	each	10.00	₹ 865.00	₹	8,650.00
08039	Brass screws 30 mm	100 Nos	60.00	₹ 145.00	₹	87.00
	Labour-					
0210	Carpenter 2nd class	Day	1.00	₹ 380.00	₹	380.00
	TOTAL				₹	9,117.00
	Add for water charge @ 1%				₹	91.17
	TOTAL				₹	9,208.17
	Add 3% for sundries & contingencies				₹	276.25
	Total				₹	9,484.42
	Add for contractor's profit and overheads @ 15%				₹	1,422.66
	Cost of 10 floor door closers				₹	10,907.08
	Cost of 1 floor door closer				₹	1,090.71
	Say				₹	1,090.70
8.83	Providing and fixing bright finished brass casement window fastener with necessary screws etc. complete.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08028	Brass casement window fastner	each	10.00	₹ 63.00	₹	630.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹	42.00
	Labour-					
0209	Carpenter 1 st class	Day	0.10	₹ 425.00	₹	42.50
	TOTAL				₹	714.50
	Add for water charge @ 1 %				₹	7.15
	TOTAL				₹	721.65
	Add 3% for sundries & contingencies				₹	21.65
	Total				₹	743.30
	Add for contractor's profit and overheads @ 15%				₹	111.50
	Cost of 10 floor window fastners				₹	854.80
	Cost of 1 floor window fastner				₹	85.48
	Say				₹	85.50
8.84	Providing and fixing bright finished brasscasement stays (straight peg type) with necessary screws etc. complete :					
8.84.1	300 mm weighing not less than 330 gms					
Code	Description	Unit	Quantity	Rate	Rate	

	Details of cost for 10 nos.				
	Materials-				
08029	Brass casement stayes 300 mm	each	10.00	₹ 148.00	₹ 1,480.00
08039	Brass screws 30 mm	100 Nos	40.00	₹ 145.00	₹ 58.00
	Labour-				
0209	Carpenter 1 st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 1,580.50
	Add for water charge @ 1%				₹ 15.81
	TOTAL				₹ 1,596.31
	Add 3% for sundries & contingencies				₹ 47.89
	Total				₹ 1,644.20
	Add for contractor's profit and overheads @ 15%				₹ 246.63
	Cost of 10 casement stayes				₹ 1,890.83
	Cost of 1 casement staye				₹ 189.08
	Say				₹ 189.10
8.84	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc. complete :				
8.84.2	250 mm weighing not less than 280 gms				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08030	Brass casement stayes 250 mm	each	10.00	₹ 125.00	₹ 1,250.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹ 42.00
	Labour-				
0209	Carpenter 1 st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 1,334.50
	Add for water charge @ 1 %				₹ 13.35
	TOTAL				₹ 1,347.85
	Add 3% for sundries & contingencies				₹ 40.44
	Total				₹ 1,388.29
	Add for contractor's profit and overheads @ 15%				₹ 208.24
	Cost of 10 casement stayes				₹ 1,596.53
	Cost of 1 casement staye				₹ 159.65
	Say				₹ 159.70
8.84	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc. complete :				
8.84.3	200 mm weighing not less than 240 gms				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08031	Brass casement stayes 200 mm	each	10.00	₹ 115.00	₹ 1,150.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹ 42.00
	Labour-				
0209	Carpenter 1 st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 1,234.50
	Add for water charge @ 1 %				₹ 12.35
	TOTAL				₹ 1,246.85
	Add 3% for sundries & contingencies				₹ 37.41
	Total				₹ 1,284.26

	Add for contractor's profit and overheads @ 15%				₹ 192.64
	Cost of 10 casement stayes				₹ 1,476.90
	Cost of 1 casement staye				₹ 147.69
	Say				₹ 147.70
8.85	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete:				
8.85.1	150 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08032	Brass Safety hasps & staples 150 mm	10 Nos	10.00	₹ 808.00	₹ 808.00
08040	Brass screws 25 mm	100 Nos	80.00	₹ 105.00	₹ 84.00
	Labour-				
0209	Carpenter 1st class	Day	0.08	₹ 425.00	₹ 34.00
	TOTAL				₹ 926.00
	Add for water charge @ 1%				₹ 9.26
	TOTAL				₹ 935.26
	Add 3% for sundries & contingencies				₹ 28.06
	Total				₹ 963.32
	Add for contractor's profit and overheads @15%				₹ 144.50
	Cost of 10 hasps and staples				₹ 1,107.82
	Cost of 1 hasps and staple				₹ 110.78
	Say				₹ 110.80
8.85	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete:				
8.85.2	115 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08033	Brass Safety hasps & staples 115 mm	10 Nos	10.00	₹ 678.00	₹ 678.00
08041	Brass screws 20 mm	100 Nos	70.00	₹ 102.00	₹ 71.40
	Labour-				
0209	Carpenter 1st class	Day	0.08	₹ 425.00	₹ 34.00
	TOTAL				₹ 783.40
	Add for water charge @ 1%				₹ 7.83
	TOTAL				₹ 791.23
	Add 3% for sundries & contingencies				₹ 23.74
	Total				₹ 814.97
	Add for contractor's profit and overheads @ 15%				₹ 122.25
	Cost of 10 hasps and staples				₹ 937.22
	Cost of 1 hasps and staple				₹ 93.72
	Say				₹ 93.70
8.85	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete:				
8.85.3	90 mm				
Code	Description	Unit	Quantity	Rate	Rate

	Details of cost for 10 nos.				
	Materials-				
08034	Brass Safety hasps & staples 90 mm	10 Nos	10.00	₹ 575.00	₹ 575.00
08041	Brass screws 20 mm	100 Nos	70.00	₹ 102.00	₹ 71.40
	Labour-				
0209	Carpenter 1 st class	Day	0.08	₹ 425.00	₹ 34.00
	TOTAL				₹ 680.40
	Add for water charge @ 1 %				₹ 6.80
	TOTAL				₹ 687.20
	Add 3% for sundries & contingencies				₹ 20.62
	Total				₹ 707.82
	Add for contractor's profit and overheads @ 15%				₹ 106.17
	Cost of 10 hasps and staples				₹ 813.99
	Cost of 1 hasps and staple				₹ 81.40
	Say				₹ 81.40
8.86	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08045	100 mm mortice latch & lock with 6 levers	each	1.00	₹ 609.00	₹ 609.00
	Labour-				
0209	Carpenter 1 st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 681.25
	Add for water charge @ 1%				₹ 6.81
	TOTAL				₹ 688.06
	Add 3% for sundries & contingencies				₹ 20.64
	Total				₹ 708.70
	Add for contractor's profit and overheads @ 15%				₹ 106.31
	Cost of 1 mortice latch and lock				₹ 815.01
	Say				₹ 815.00
8.87	Providing and fixing chromium plated brass night latch including necessary screws etc. complete (Best make of approved quality).				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08050	Brass night latch	each	1.00	₹ 558.00	₹ 558.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 630.25
	Add for water charge @ 1 %				₹ 6.30
	TOTAL				₹ 636.55
	Add 3% for sundries & contingencies				₹ 19.10
	Total				₹ 655.65
	Add for contractor's profit and overheads @ 15%				₹ 98.35
	Cost of 1 mortice latch and lock				₹ 754.00
	Say				₹ 754.00

8.88	Providing and fixing special quality chromium plated brass cupboard locks with six levers including necessary screws etc. complete (Best make of approved quality) of :				
8.88.1	Size 40 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08159	40 mm lock	each	1.00	₹ 75.00	₹ 75.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 147.25
	Add for water charge @ 1 %				₹ 1.47
	TOTAL				₹ 148.72
	Add 3% for sundries & contingencies				₹ 4.46
	Total				₹ 153.18
	Add for contractor's profit and overheads @ 15%				₹ 22.98
	Cost of 1 mortice latch and lock				₹ 176.16
	Say				₹ 176.20
8.88	Providing and fixing special quality chromium plated brass cupboard locks with six levers including necessary screws etc. complete (Best make of approved quality) of :				
8.88.2	Size 50 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	Materials-				
08160	50 mm lock	each	1.00	₹ 85.00	₹ 85.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 157.25
	Add for water charge @ 1 %				₹ 1.57
	TOTAL				₹ 158.82
	Add 3% for sundries & contingencies				₹ 4.76
	Total				₹ 163.58
	Add for contractor's profit and overheads @ 15%				₹ 24.54
	Cost of 1 mortice latch and lock				₹ 188.12
	Say				₹ 188.10
8.88	Providing and fixing special quality chromium plated brass cupboard locks with six levers including necessary screws etc. complete (Best make of approved quality) of ::				
8.88.3	Size 65 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 no.				
	Materials-				
08161	65 mm lock	each	1.00	₹ 98.00	₹ 98.00
	Labour-				
0209	Carpenter 1 st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 170.25
	Add for water charge @ 1 %				₹ 1.70
	TOTAL				₹ 171.95
	Add 3% for sundries & contingencies				₹ 5.16
	Total				₹ 177.11
	Add for contractor's profit and overheads @ 15%				₹ 26.57

	Cost of 1 mortice latch and lock				₹ 203.68
	Say				₹ 203.70
8.88	Providing and fixing special quality chromium plated brass cupboard locks with six levers including necessary screws etc. complete (Best make of approved quality) of :				
8.88.4	Size 75 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for one				
	Materials-				
08162	75 mm lock	each	1.00	₹ 125.00	₹ 125.00
	Labour-				
0209	Carpenter 1st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 197.25
	Add for water charge @ 1 %				₹ 1.97
	TOTAL				₹ 199.22
	Add 3% for sundries & contingencies				₹ 5.98
	Total				₹ 205.20
	Add for contractor's profit and overheads @ 15%				₹ 30.78
	Cost of 1 mortice latch and lock				₹ 235.98
	Say				₹ 236.00
8.89	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08051	Cupboard knob	each	10.00	₹ 52.00	₹ 520.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
	TOTAL				₹ 579.50
	Add for water charge @ 1 %				₹ 5.80
	TOTAL				₹ 585.30
	Add 3% for sundries & contingencies				₹ 17.56
	Total				₹ 602.86
	Add for contractor's profit and overheads @ 15%				₹ 90.43
	Cost of 10 cupboard knob				₹ 693.29
	Cost of 1 cupboard knob				₹ 69.33
	Say				₹ 69.30
8.90	Providing and fixing chromium plated brass handles with necessary screws etc. complete:				
8.90.1	125 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08042	Chromium plated brass handles 125 mm	each	10.00	₹ 208.00	₹ 2,080.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹ 42.00
	Labour-				
0209	Carpenter 1 st class	Day	0.06	₹ 425.00	₹ 25.50
	TOTAL				₹ 2,147.50
	Add for water charge @ 1 %				₹ 21.48
	TOTAL				₹ 2,168.98

	Add 3% for sundries & contingencies				₹	65.07
	Total				₹	2,234.05
	Add for contractor's profit and overheads @ 15%				₹	335.11
	Cost of 10 handles				₹	2,569.16
	Cost of 1 handle				₹	256.92
	Say				₹	256.90
8.90	Providing and fixing chromium plated brass handles with necessary screws etc. complete:					
8.90.2	100 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08043	Chromium plated brass handles 100 mm	each	10.00	₹ 180.00	₹	1,800.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹	42.00
	Labour-					
0209	Carpenter 1 st class	Day	0.06	₹ 425.00	₹	25.50
	TOTAL				₹	1,867.50
	Add for water charge @ 1%				₹	18.68
	TOTAL				₹	1,886.18
	Add 3% for sundries & contingencies				₹	56.59
	Total				₹	1,942.77
	Add for contractor's profit and overheads @ 15%				₹	291.42
	Cost of 10 handles				₹	2,234.19
	Cost of 1 handle				₹	223.42
	Say				₹	223.40
8.90	Providing and fixing chromium plated brass handles with necessary screws etc. complete:					
8.90.3	75 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08044	Chromium plated brass handles 75 mm	each	10.00	₹ 155.00	₹	1,550.00
08040	Brass screws 25 mm	100 Nos	40.00	₹ 105.00	₹	42.00
	Labour-					
0209	Carpenter 1st class	Day	0.06	₹ 425.00	₹	25.50
	TOTAL				₹	1,617.50
	Add for water charge @ 1%				₹	16.18
	TOTAL				₹	1,633.68
	Add 3% for sundries & contingencies				₹	49.01
	Total				₹	1,682.69
	Add for contractor's profit and overheads @ 15%				₹	252.40
	Cost of 10 handles				₹	1,935.09
	Cost of 1 handle				₹	193.51
	Say				₹	193.50
8.91	Providing and fixing chromium plated brass casement window fastener with necessary screws etc. complete.					

Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08046	C.P. brass window fastner	each	10.00	₹ 102.00	₹ 1,020.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹ 52.00
	Labour-				
0209	Carpenter 1st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 1,114.50
	Add for water charge @ 1 %				₹ 11.15
	TOTAL				₹ 1,125.65
	Add 3% for sundries & contingencies				₹ 33.77
	Total				₹ 1,159.42
	Add for contractor's profit and overheads @ 15%				₹ 173.91
	Cost of 10 window fasteners				₹ 1,333.33
	Cost of 1 window fastener				₹ 133.33
	Say				₹ 133.30
8.92	Providing and fixing chromium plated brass casement stays (straight peg type) with necessary screws etc. complete :				
8.92.1	300 mm weighing not less than 330 gms				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Material s-				
08047	C.P. brass casement stays 300 mm	each	10.00	₹ 174.00	₹ 1,740.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹ 52.00
	Labour-				
0209	Carpenter 1 st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 1,834.50
	Add for water charge @ 1 %				₹ 18.35
	TOTAL				₹ 1,852.85
	Add 3% for sundries & contingencies				₹ 55.59
	Total				₹ 1,908.44
	Add for contractor's profit and overheads @ 15%				₹ 286.27
	Cost of 10 window fasteners				₹ 2,194.71
	Cost of 1 window fastener				₹ 219.47
	Say				₹ 219.50
8.92	Providing and fixing chromium plated brass casement stays (straight peg type) with necessary screws etc. complete :				
8.92.2	250 mm weighing not less than 280 gms				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08048	C.P. brass casement stays 250 mm	each	10.00	₹ 145.00	₹ 1,450.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹ 52.00
	Labour-				
0209	Carpenter 1st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 1,544.50
	Add for water charge @ 1 %				₹ 15.45

	TOTAL				₹	1,559.95
	Add 3% for sundries & contingencies				₹	46.80
	Total				₹	1,606.75
	Add for contractor's profit and overheads @15%				₹	241.01
	Cost of 10 window fasteners				₹	1,847.76
	Cost of 1 window fastener				₹	184.78
	Say				₹	184.80
8.92	Providing and fixing chromium plated brass casement stays (straight peg type) with necessary screws etc. complete :					
8.92.3	200 mm weighing not less than 240 gms					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08049	C.P. brass casement stays 200 mm	each	10.00	₹ 130.00	₹	1,300.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹	52.00
	Labour-					
0209	Carpenter 1st class	Day	0.10	₹ 425.00	₹	42.50
	TOTAL				₹	1,394.50
	Add for water charge @ 1 %				₹	13.95
	TOTAL				₹	1,408.45
	Add 3% for sundries & contingencies				₹	42.25
	Total				₹	1,450.70
	Add for contractor's profit and overheads @ 15%				₹	217.61
	Cost of 10 window fasteners				₹	1,668.31
	Cost of 1 window fastener				₹	166.83
	Say				₹	166.80
8.93	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with					
8.93.1	125x75x4 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08105	Aluminium butt hinges 125x75x4.00 mm	10 Nos	10.00	₹ 645.00	₹	645.00
08052	C.P.brass screws 50 mm	100 Nos	100.00	₹ 256.00	₹	256.00
	Labour-					
0209	Carpenter 1st class	Day	0.14	₹ 425.00	₹	59.50
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	987.50
	Add for water charge @ 1 %				₹	9.88
	TOTAL				₹	997.38
	Add 3% for sundries & contingencies				₹	29.92
	Total				₹	1,027.30
	Add for contractor's profit and overheads @ 15%				₹	154.10
	Cost of 10 nos.				₹	1,181.40
	Cost of 1 no.				₹	118.14
	Say				₹	118.10

8.93	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with				
8.93.2	125x63x4 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08106	Aluminium butt hinges 125x63x4.00 mm	10 Nos	10.00	₹ 580.00	₹ 580.00
08052	C.P.brass screws 50 mm	100 Nos	100.00	₹ 256.00	₹ 256.00
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 922.50
	Add for water charge @ 1 %				₹ 9.23
	TOTAL				₹ 931.73
	Add 3% for sundries & contingencies				₹ 27.95
	Total				₹ 959.68
	Add for contractor's profit and overheads @ 15%				₹ 143.95
	Cost of 10 nos.				₹ 1,103.63
	Cost of 1 no.				₹ 110.36
	Say				₹ 110.40
8.93	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
8.93.3	100x75x4 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08107	Aluminium butt hinges 100x75x4.00 mm	10 Nos	10.00	₹ 630.00	₹ 630.00
08053	C.P.brass screws 40 mm	100 Nos	80.00	₹ 228.00	₹ 182.40
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 898.90
	Add for water charge @ 1%				₹ 8.99
	TOTAL				₹ 907.89
	Add 3% for sundries & contingencies				₹ 27.24
	Total				₹ 935.13
	Add for contractor's profit and overheads @ 15%				₹ 140.27
	Cost of 10 nos.				₹ 1,075.40
	Cost of 1 no.				₹ 107.54
	Say				₹ 107.50
8.93	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
8.93.4	100x63x4 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				

08109	Aluminium butt hinges 100x63x4.00 mm	10 Nos	10.00	₹ 530.00	₹ 530.00
08053	C.P.brass screws 40 mm	100 Nos	80.00	₹ 228.00	₹ 182.40
	Labour-				
0209	Carpenter 1st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 798.90
	Add for water charge @ 1%				₹ 7.99
	TOTAL				₹ 806.89
	Add 3% for sundries & contingencies				₹ 24.21
	Total				₹ 831.10
	Add for contractor's profit and overheads @15%				₹ 124.67
	Cost of 10 nos.				₹ 955.77
	Cost of 1 no.				₹ 95.58
	Say				₹ 95.60
8.93	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
8.93.5	100x63x3.2 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08108	Aluminium butt hinges 100x63x3.20 mm	10 Nos	10.00	₹ 510.00	₹ 510.00
08053	C.P.brass screws 40 mm	100 Nos	80.00	₹ 228.00	₹ 182.40
	Labour-				
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 778.90
	Add for water charge @ 1 %				₹ 7.79
	TOTAL				₹ 786.69
	Add 3% for sundries & contingencies				₹ 23.60
	Total				₹ 810.29
	Add for contractor's profit and overheads @15%				₹ 121.54
	Cost of 10 nos.				₹ 931.83
	Cost of 1 no.				₹ 93.18
	Say				₹ 93.20
8.83	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
8.83.6	75x63x4 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08110	Aluminium butt hinges 75x63x4.00 mm	10 Nos	10.00	₹ 450.00	₹ 450.00
08054	C.P.brass screws 30 mm	100 Nos	60.00	₹ 167.00	₹ 100.20
	Labour-				
0209	Carpenter 1st class	Day	0.14	₹ 425.00	₹ 59.50
0203	Beldar	Day	0.09	₹ 300.00	₹ 27.00
	TOTAL				₹ 636.70

	Add for water charge @ 1 %				₹	6.37
	TOTAL				₹	643.07
	Add 3% for sundries & contingencies				₹	19.29
	Total				₹	662.36
	Add for contractor's profit and overheads @ 15%				₹	99.35
	Cost of 10 nos.				₹	761.71
	Cost of 1 no.				₹	76.17
	Say				₹	76.20
8.93	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:					
8.93.7	75x63x3.2 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08111	Aluminium butt hinges 75x63x3.20 mm	10 Nos	10.00	₹ 300.00	₹	300.00
08054	C.P.brass screws 30 mm	100 Nos	60.00	₹ 167.00	₹	100.20
	Labour-					
0209	Carpenter 1st class	Day	0.14	₹ 425.00	₹	59.50
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	486.70
	Add for water charge @ 1%				₹	4.87
	TOTAL				₹	491.57
	Add 3% for sundries & contingencies				₹	14.75
	Total				₹	506.32
	Add for contractor's profit and overheads @15%				₹	75.95
	Cost of 10 nos.				₹	582.27
	Cost of 1 no.				₹	58.23
	Say				₹	58.20
8.93	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete: .					
8.93.8	75x45x3.2 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08112	Aluminium butt hinges 75x45x3.20 mm	10 Nos	10.00	₹ 230.00	₹	230.00
08054	C.P.brass screws 30 mm	100 Nos	60.00	₹ 167.00	₹	100.20
	Labour-					
0209	Carpenter 1 st class	Day	0.14	₹ 425.00	₹	59.50
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	416.70
	Add for water charge @ 1%				₹	4.17
	TOTAL				₹	420.87
	Add 3% for sundries & contingencies				₹	12.63
	Total				₹	433.50
	Add for contractor's profit and overheads @ 15%				₹	65.03

	Cost of 10 nos.				₹	498.53
	Cost of 1 no.				₹	49.85
	Say				₹	49.90
8.94	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :					
8.94.1	300x16 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08113	Aluminium sliding bolt 300x16 mm	each	10.00	₹ 180.00	₹	1,800.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹	52.00
	Labour-					
0209	Carpenter 1st class	Day	0.50	₹ 425.00	₹	212.50
	TOTAL				₹	2,064.50
	Add for water charge @ 1%				₹	20.65
	TOTAL				₹	2,085.15
	Add 3% for sundries & contingencies				₹	62.55
	Total				₹	2,147.70
	Add for contractor's profit and overheads @ 15%				₹	322.16
	Cost of 10 sliding bolts				₹	2,469.86
	Cost of 1 sliding bolt				₹	246.99
	Say				₹	247.00
8.94	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :					
8.94.2	250x16 mm					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10 nos.					
	Materials-					
08114	Aluminium sliding bolt 250x16 mm	each	10.00	₹ 145.00	₹	1,450.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹	52.00
	Labour-					
0209	Carpenter 1st class	Day	0.50	₹ 425.00	₹	212.50
	TOTAL				₹	1,714.50
	Add for water charge @ 1 %				₹	17.15
	TOTAL				₹	1,731.65
	Add 3% for sundries & contingencies				₹	51.95
	Total				₹	1,783.60
	Add for contractor's profit and overheads @ 15%				₹	267.54
	Cost of 10 sliding bolts				₹	2,051.14
	Cost of 1 sliding bolt				₹	205.11
	Say				₹	205.10
8.95	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :					
8.95.1	300x10 mm					
Code	Description	Unit	Quantity	Rate	Rate	

	Details of cost for 10 nos.				
	Materials-				
08115	Aluminium tower bolt (barrel type)300x10 mm	10 Nos	10.00	₹ 730.00	₹ 730.00
08054	C.P. brass screws 30 mm	100 Nos	80.00	₹ 167.00	₹ 133.60
	Labour-				
0209	Carpenter 1st class	Day	0.125	₹ 425.00	₹ 53.13
	TOTAL				₹ 916.73
	Add for water charge @ 1%				₹ 9.17
	TOTAL				₹ 925.90
	Add 3% for sundries & contingencies				₹ 27.78
	Total				₹ 953.68
	Add for contractor's profit and overheads @ 15%				₹ 143.05
	Cost of 10 tower bolts				₹ 1,096.73
	Cost of 1 tower bolt				₹ 109.67
	Say				₹ 109.70
8.95	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
8.95.2	250x10 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08116	Aluminium tower bolt (barrel type) 250x10 mm	10 Nos	10.00	₹ 530.00	₹ 530.00
08054	C.P. brass screws 30 mm	100 Nos	80.00	₹ 167.00	₹ 133.60
	Labour-				
0209	Carpenter 1st class	Day	0.125	₹ 425.00	₹ 53.13
	TOTAL				₹ 716.73
	Add for water charge @ 1 %				₹ 7.17
	TOTAL				₹ 723.90
	Add 3% for sundries & contingencies				₹ 21.72
	Total				₹ 745.62
	Add for contractor's profit and overheads @ 15%				₹ 111.84
	Cost of 10 tower bolts				₹ 857.46
	Cost of 1 tower bolt				₹ 85.75
	Say				₹ 85.80
8.95	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
8.95.3	200x10 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08117	Aluminium tower bolt (barrel type) 200x10 mm	10 Nos	10.00	₹ 470.00	₹ 470.00
08054	C.P. brass screws 30 mm	100 Nos	80.00	₹ 167.00	₹ 133.60
	Labour-				

0209	Carpenter 1 st class	Day	0.125	₹	425.00	₹	53.13
	TOTAL					₹	656.73
	Add for water charge @ 1%					₹	6.57
	TOTAL					₹	663.30
	Add 3% for sundries & contingencies					₹	19.90
	Total					₹	683.20
	Add for contractor's profit and overheads @ 15%					₹	102.48
	Cost of 10 tower bolts					₹	785.68
	Cost of 1 tower bolt					₹	78.57
	Say					₹	78.60
8.95	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :						
8.95.4	150x10 mm						
Code	Description	Unit	Quantity	Rate		Rate	
	Details of cost for 10 nos.						
	Materials-						
08118	Aluminium tower bolt barrel type) 150x10 mm	10 Nos	10.00	₹	420.00	₹	420.00
08054	C.P. brass screws 30 mm	100 Nos	80.00	₹	167.00	₹	133.60
	Labour-						
0209	Carpenter 1st class	Day	0.08	₹	425.00	₹	34.00
	TOTAL					₹	587.60
	Add for water charge @ 1%					₹	5.88
	TOTAL					₹	593.48
	Add 3% for sundries & contingencies					₹	17.80
	Total					₹	611.28
	Add for contractor's profit and overheads @ 15%					₹	91.69
	Cost of 10 tower bolts					₹	702.97
	Cost of 1 tower bolt					₹	70.30
	Say					₹	70.30
8.95	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :						
8.95.5	100x10 mm						
Code	Description	Unit	Quantity	Rate		Rate	
	Details of cost for 10 nos.						
	Materials-						
08119	Aluminium tower bolt (barrel type) 100x10 mm	10 Nos	10.00	₹	310.00	₹	310.00
08054	C.P. brass screws 30 mm	100 Nos	60.00	₹	167.00	₹	100.20
	Labour-						
0209	Carpenter 1st class	Day	0.08	₹	425.00	₹	34.00
	TOTAL					₹	444.20
	Add for water charge @ 1 %					₹	4.44
	TOTAL					₹	448.64
	Add 3% for sundries & contingencies					₹	13.46
	Total					₹	462.10

	Add for contractor's profit and overheads @ 15%				₹ 69.32
	Cost of 10 tower bolts				₹ 531.42
	Cost of 1 tower bolt				₹ 53.14
	Say				₹ 53.10
8.96	Providing and fixing aluminium pull bolt lock anodised ISI marked (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws bolts, nuts and washers etc. complete.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 pull bolt lock				
	Materials-				
08157	aluminum Pull bolt lock with necessary screws,	each	10.00	₹ 60.00	₹ 600.00
	bolts, eachnuts and washers complete				
	Labour-				
0210	Carpenter 2nd class	Day	0.25	₹ 380.00	₹ 95.00
	TOTAL				₹ 695.00
	Add for water charge @ 1%				₹ 6.95
	TOTAL				₹ 701.95
	Add 3% for sundries & contingencies				₹ 21.06
	Total				₹ 723.01
	Add for contractor's profit and overheads @ 15%				₹ 108.45
	Cost of 10 pull bolt locks				₹ 831.46
	Cost of 1 pull bolt lock				₹ 83.15
	Say				₹ 83.20
8.97	Providing and fixing 50cm long aluminium kicking plate 100x3.15 mm anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials				
08123	Kicking plate 50 cm long - 100x3.15 mm	each	10.00	₹ 140.00	₹ 1,400.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹ 52.00
	Labour-				
0209	Carpenter 1 st class	Day	0.07	₹ 425.00	₹ 29.75
0203	Beldar	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 1,496.75
	Add for water charge @ 1 %				₹ 14.97
	TOTAL				₹ 1,511.72
	Add 3% for sundries & contingencies				₹ 45.35
	Total				₹ 1,557.07
	Add for contractor's profit and overheads @15%				₹ 233.56
	Cost of 10 kicking plates				₹ 1,790.63
	Cost of 1 kicking plate				₹ 179.06
	Say				₹ 179.10
8.98	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				

8.98.1	125 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08120	Aluminium handles 125 mm	10 Nos	10.00	₹ 400.00	₹ 400.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹ 52.00
	Labour-				
0209	Carpenter 1st class	Day	0.06	₹ 425.00	₹ 25.50
	TOTAL				₹ 477.50
	Add for water charge @ 1%				₹ 4.78
	TOTAL				₹ 482.28
	Add 3% for sundries & contingencies				₹ 14.47
	Total				₹ 496.75
	Add for contractor's profit and overheads @ 15%				₹ 74.51
	Cost of 10 handles				₹ 571.26
	Cost of 1 handle				₹ 57.13
	Say				₹ 57.10
8.98	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
8.98.2	100 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08121	Aluminium handles 100 mm	10 Nos	10.00	₹ 280.00	₹ 280.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹ 52.00
	Labour-				
0209	Carpenter 1 st class	Day	0.06	₹ 425.00	₹ 25.50
	TOTAL				₹ 357.50
	Add for water charge @ 1 %				₹ 3.58
	TOTAL				₹ 361.08
	Add 3% for sundries & contingencies				₹ 10.83
	Total				₹ 371.91
	Add for contractor's profit and overheads @ 15%				₹ 55.79
	Cost of 10 handles				₹ 427.70
	Cost of 1 handle				₹ 42.77
	Say				₹ 42.80
8.98	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
8.98.3	75 mm				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08122	Aluminium handles 75 mm	10 Nos	10.00	₹ 230.00	₹ 230.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 108.00	₹ 43.20
	Labour-				

0209	Carpenter 1st class	Day	0.06	₹ 425.00	₹ 25.50
	TOTAL				₹ 298.70
	Add for water charge @ 1 %				₹ 2.99
	TOTAL				₹ 301.69
	Add 3% for sundries & contingencies				₹ 9.05
	Total				₹ 310.74
	Add for contractor's profit and overheads @ 15%				₹ 46.61
	Cost of 10 handles				₹ 357.35
	Cost of 1 handle				₹ 35.74
	Say				₹ 35.70
8.99	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.				
8.99.1	Single rubber stopper				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08156	Aluminium hanging floor door stopper 75 mm	each	10.00	₹ 25.00	₹ 250.00
08055	C.P. brass screws 25 mm	100 Nos	20.00	₹ 130.00	₹ 26.00
	Labour-				
0111	Carpenter 1 st class	Day	0.03	₹ 425.00	₹ 12.75
	TOTAL				₹ 288.75
	Add for water charge @ 1 %				₹ 2.89
	TOTAL				₹ 291.64
	Add 3% for sundries & contingencies				₹ 8.75
	Total				₹ 300.39
	Add for contractor's profit and overheads @ 15%				₹ 45.06
	Cost of 10 door stoppers				₹ 345.45
	Cost of 1 stopper				₹ 34.55
	Say				₹ 34.60
8.99	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.				
8.99.2	Twin rubber stopper				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08184	Aluminium hanging floor door stopper with twin rubber stopper	each	10.00	₹ 40.00	₹ 400.00
08055	C.P. brass screws 25 mm	100 Nos	20.00	₹ 130.00	₹ 26.00
	Labour-				
0111	Carpenter 1st class	Day	0.03	₹ 425.00	₹ 12.75
	TOTAL				₹ 438.75
	Add for water charge @ 1 %				₹ 4.39
	TOTAL				₹ 443.14
	Add 3% for sundries & contingencies				₹ 13.29
	Total				₹ 456.43
	Add for contractor's profit and overheads @ 15%				₹ 68.46
	Cost of 10 door stoppers				₹ 524.89

	Cost of 1 stopper				₹ 52.49
	Say				₹ 52.50
8.10	Providing and fixing aluminium casement stays ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 nos.				
	Materials-				
08158	Aluminium casement stays	each	10.00	₹ 35.00	₹ 350.00
08055	C.P. brass screws 25 mm	100 Nos	40.00	₹ 130.00	₹ 52.00
	Labour-				
0111	Carpenter 1 st class	Day	0.10	₹ 425.00	₹ 42.50
	TOTAL				₹ 444.50
	Add for water charge @ 1 %				₹ 4.45
	TOTAL				₹ 448.95
	Add 3% for sundries & contingencies				₹ 13.47
	Total				₹ 462.42
	Add for contractor's profit and overheads @ 15%				₹ 69.36
	Cost of 10 casement stays				₹ 531.78
	Cost of 1 casement stay				₹ 53.18
	Say				₹ 53.20
8.10	Providing and fixing bright finished brass 100 mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles with necessary screws etc. complete (Best make of approved quality)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 lock				
	Materials-				
08166	100 mm mortice latch and lock (without handles)	each	1.00	₹ 295.00	₹ 295.00
08167	Pair of aluminium handles	each	1.00	₹ 350.00	₹ 350.00
	Labour-				
0111	Carpenter 1 st class	Day	0.17	₹ 425.00	₹ 72.25
	TOTAL				₹ 717.25
	Add for water charge @ 1%				₹ 7.17
	TOTAL				₹ 724.42
	Add 3% for sundries & contingencies				₹ 21.73
	Total				₹ 746.15
	Add for contractor's profit and overheads @ 15%				₹ 111.92
	Cost of 1 lock				₹ 858.07
	Say				₹ 858.10
8.10	Providing and fixing aluminium tee channels (heavy duty) with rollers, stop end in pelmets as curtain rod.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 2m long				
	Materials-				
08183	Aluminium channel (heavy duty) with and stop end as curtain rod	metre	2.00	₹ 62.00	₹ 124.00
	TOTAL				₹ 124.00
	Add for water charge @ 1%				₹ 1.24

	TOTAL				₹	125.24
	Add 3% for sundries & contingencies				₹	3.76
	Total				₹	129.00
	Add for contractor's profit and overheads @15%				₹	19.35
	Cost of 2 m				₹	148.35
	Cost of 1 m				₹	74.18
	Say				₹	74.20
8.10	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board including providing and fixing of frame work made of special section power pressed/ role form G.I. sheet with zinc coating of grade 175 consisting of floor and ceiling channel 50 mm wide having equal flanges of 32 mm and 0.50 mm thick fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.50 mm diameter, 40 mm length and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing 450 mm centre to centre and fixing of boards to either side of frame work by 25 mm drive all screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, joint finisher and two coats of primer suitable for boards as per manufacture's specification and direction of the Engineer-In-Charge all complete.					
8.103.1:	67mm overall thickness partition with 8.5 mm thick double skin Glass reinforced Gypsum (GRG) board conforming to IS: 2095: part III					
Code	Description		Unit	Quantity	Rate	
	Materials for $6.00 \times 3.65 = 21.90$ sqm. (Partition Panel)					
08206	(i)Glass reinforced Gypsum (GRG) board 8.50 mm thick	sqm	43.80	₹ 270.00	₹	11,826.00
08207	(ii)50 mm floor and ceiling channel $2 \times 6.00 = 12.00$ m	metre	12.00	₹ 85.00	₹	1,020.00
08208	(iii) 48 mm stud- $72 \times 34 \times 36 \times 0.50$ mm	metre	40.15	₹ 95.00	₹	3,814.25
	$(6.00/0.61) + 1 = 11 \times 3.65$					
08170	(iv) Screw 20mm long (drive all screws)	100 Nos	392.00	₹ -	₹	-
	$[(3.65/0.30) + 1] \times 11 \times 2 = 308$ Nos					
	$[(6.00/0.30) + 1] \times 2 \times 2 = 84$ Nos = 392 Nos					
08169	(v) Dash fastner $[(6.00/0.61) + 1] \times 2 = 22$ Nos	each	22.00	₹ 30.00	₹	660.00
05050	(vi) Rawl plug $[(3.65/0.45) + 1] \times 2 = 18$ Nos	each	18.00	₹ 7.00	₹	126.00
12041	(vii) Plaster of paris, $(88/100) \times 21.90 = 19.27$ Kg	kilogram	19.27	₹ 22.00	₹	423.94
08136	(viii)Glue $(22/100) \times 21.90 = 4.82$ Kg	kilogram	4.82	₹ 135.00	₹	650.70
08168	(ix) Paper tape (120m roll)	roll	0.584	₹ 145.00	₹	84.68
	$(300/100) \times 21.90/120 = 0.584$ Nos.					
08171	(x) Primer $(36/100) \times 21.90 = 7.88$ litre	litre	7.88	₹ 95.00	₹	748.60
08143	(xi) Galvanised steel bolts & nuts 6mm dia 25mm Long	10 Nos	44.00	₹ 15.00	₹	66.00
	$11 \times 2 \times 2 = 44$ Nos					

08145	(xii) G.I. Plain washer for seam bolts	100 Nos	44.00	₹	40.00	₹	17.60
	Labour for 21.90 sqm.						
0209	Carpernter 1st class $0.30 \times 21.90 = 6.57$ Day	Day	6.57	₹	425.00	₹	2,792.25
0210	Carpenter 2nd class $0.13 \times 21.90 = 2.847$ Day	Day	2.847	₹	380.00	₹	1,081.86
0227	Painter $0.05 \times 21.90 = 1.905$ Day	Day	1.095	₹	340.00	₹	372.30
0203	Beldar $0.35 \times 21.90 = 7.665$ Day	Day	7.665	₹	300.00	₹	2,299.50
	TOTAL					₹	25,983.68
	Add for water charge @ 1 %					₹	259.84
	TOTAL					₹	26,243.52
	Add 3% for sundries & contingencies					₹	787.31
	Total					₹	27,030.83
	Add for contractor's profit and overheads @ 15%					₹	4,054.62
	Cost for 21.90 sqm					₹	31,085.45
	Cost for 1 sqm.					₹	1,419.43
	Say					₹	1,419.40
8.10	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board including providing and fixing of frame work made of special section power pressed/ role form G.I. sheet with zinc coating of grade 175 consisting of floor and ceiling channel 50 mm wide having equal flanges of 32 mm and 0.50 mm thick fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.50 mm diameter, 40 mm length and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing 450 mm centre to centre and fixing of boards to either side of frame work by 25 mm drive all screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre, including jointing and finishing to a flush finish with recommended jointing compound , jointing tape, joint finisher and two coats of primer suitable for boards as per manufacture's specification and direction of the Engineer-In-Charge all complete.						
8.103.2	75mm overall thickness partition with 12.5mm thick double skin plain Gypsum board conforming to IS: 2095: part I						
Code	Description		Unit		Quantity		Rate
	Materials for $6.00 \times 3.65 = 21.90$ sqm. (Partition Panel)						
08269	(i) 12.50 mm thick plain Gypsum board $2 \times 6.00 \times 3.65 = 43.80$ Sqm	sqm	43.80	₹	215.00	₹	9,417.00
08207	(ii)50 mm floor and ceiling channel $2 \times 6.00 = 12.00$ m	metre	12.00	₹	85.00	₹	1,020.00
08208	(iii) 48 mm stud- $72 \times 34 \times 36 \times 0.50$ mm $(6.00/0.61) + 1 = 11 \times 3.65$	metre	40.15	₹	95.00	₹	3,814.25
08170	(iv) Screw 20mm long (drive all scews)	100 Nos	392.00	₹	-	₹	-
	$[(3.65/0.30) + 1] \times 11 \times 2 = 308$ Nos						
	$[(6.00/0.30) + 1] \times 2 \times 2 = 84$ Nos $= 392$ Nos						

08169	(v) Dash fastner $[(6.00/0.61) + 1] \times 2 = 22$ Nos	each	22.00	₹ 30.00	₹ 660.00
05050	(vi) Rawl plug $[(3.65/0.45) + 1] \times 2 = 18$ Nos	each	18.00	₹ 7.00	₹ 126.00
12041	(vii) Plaster of paris, $(88/100) \times 21.90 = 19.27$ Kg	kilogram	19.27	₹ 22.00	₹ 423.94
08136	(viii) Glue $(22/100) \times 21.90 = 4.82$ Kg	kilogram	4.82	₹ 135.00	₹ 650.70
08168	(ix) Paper tape (120m roll)	roll	0.584	₹ 145.00	₹ 84.68
	$(300/100) \times 21.90/120 = 0.584$ Nos.				
08171	(x) Primer $(36/100) \times 21.90 = 7.88$ litre	litre	7.88	₹ 95.00	₹ 748.60
08143	(xi) Galvanised steel bolts & nuts 6mm dia 25mm Long	10 Nos	44.00	₹ 15.00	₹ 66.00
	$11 \times 2 \times 2 = 44$ Nos				
08145	(xii) G.I. Plain washer for seam bolts	100 Nos	44.00	₹ 40.00	₹ 17.60
	Labour for 21.90 sqm.				
0209	Carpernter 1st class $0.30 \times 21.90 = 6.57$ Day	Day	6.57	₹ 425.00	₹ 2,792.25
0210	Carpenter 2nd class $0.13 \times 21.90 = 2.847$ Day	Day	2.847	₹ 380.00	₹ 1,081.86
0227	Painter $0.05 \times 21.90 = 1.905$ Day	Day	1.095	₹ 340.00	₹ 372.30
0203	Beldar $0.35 \times 21.90 = 7.665$ Day	Day	7.665	₹ 300.00	₹ 2,299.50
	TOTAL				₹ 23,574.68
	Add for water charge @ 1 %				₹ 235.75
	TOTAL				₹ 23,810.43
	Add 3% for sundries & contingencies				₹ 714.31
	Total				₹ 24,524.74
	Add for contractor's profit and overheads @ 15%				₹ 3,678.71
	Cost for 21.90 sqm				₹ 28,203.45
	Cost for 1 sqm.				₹ 1,287.83
	Say				₹ 1,287.80
8.10	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board including providing and fixing of frame work made of special section power pressed/ role form G.I. sheet with zinc coating of grade 175 consisting of floor and ceiling channel 50 mm wide having equal flanges of 32 mm and 0.50 mm thick fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.50 mm diameter, 40 mm length and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing 450 mm centre to centre and fixing of boards to either side of frame work by 25 mm drive all screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, joint finisher and two coats of primer suitable for boards as per manufacture's specification and direction of the Engineer-In-Charge all complete.				
8.103.3	66mm overall thickness Partition with 8mm thick double skin Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure. Non Combustible & spread of flames (as per BS standard 476 part IV & VII), Water, Termite & Fungus Resistant, Compressive strength 225 Kg/Sq.cm, Bending strength 100 Kg/Sq.cm.				
Code	Description	Unit	Quantity	Rate	

	Materials for $6.00 \times 3.65 = 21.90$ sqm. (Partition Panel)				
08255	(i) 8.00 mm thick tapered edge calcium silicate board. $2 \times 6.00 \times 3.65 = 43.80$ Sqm	sqm	43.80	₹ 275.00	₹ 12,045.00
08207	(ii) 50 mm floor and ceiling channel $2 \times 6.00 = 12.00$ m	metre	12.00	₹ 85.00	₹ 1,020.00
08208	(iii) 48 mm stud- $72 \times 34 \times 36 \times 0.50$ mm	metre	40.15	₹ 95.00	₹ 3,814.25
	$(6.00/0.61) + 1 = 11 \times 3.65 = 40.15$ m				
08170	(iv) Screw 20mm long (drive all screws)	100 Nos	392.00	₹ -	₹ -
	$[(3.65/0.30) + 1] \times 11 \times 2 = 308$ Nos				
	$[(6.00/0.30) + 1] \times 2 \times 2 = 84$ Nos $= 392$ Nos				
08169	(v) Dash fastner $[(6.00/0.61) + 1] \times 2 = 22$ Nos	each	22.00	₹ 30.00	₹ 660.00
05050	(vi) Rawl plug $[(3.65/0.45) + 1] \times 2 = 18$ Nos	each	18.00	₹ 7.00	₹ 126.00
12041	(vii) Plaster of paris, $(88/100) \times 21.90 = 19.27$ Kg	kilogram	19.27	₹ 22.00	₹ 423.94
08136	(viii) Glue $(22/100) \times 21.90 = 4.82$ Kg	kilogram	4.82	₹ 135.00	₹ 650.70
08168	(ix) Paper tape (120m roll)	roll	0.584	₹ 145.00	₹ 84.68
	$(300/100) \times 21.90/120 = 0.584$ Nos.				
08171	(x) Primer $(36/100) \times 21.90 = 7.88$ litre	litre	7.88	₹ 95.00	₹ 748.60
08143	(xi) Galvanised steel bolts & nuts 6mm dia 25mm Long	10 Nos	44.00	₹ 15.00	₹ 66.00
	$11 \times 2 \times 2 = 44$ Nos				
08145	(xii) G.I. Plain washer for seam bolts	100 Nos	44.00	₹ 40.00	₹ 17.60
	Labour for 21.90 sqm.				
0209	Carpenter 1st class $0.30 \times 21.90 = 6.57$ Day	Day	6.57	₹ 425.00	₹ 2,792.25
0210	Carpenter 2nd class $0.13 \times 21.90 = 2.847$ Day	Day	2.847	₹ 380.00	₹ 1,081.86
0227	Painter $0.05 \times 21.90 = 1.095$ Day	Day	1.095	₹ 340.00	₹ 372.30
0203	Beldar $0.35 \times 21.90 = 7.665$ Day	Day	7.665	₹ 300.00	₹ 2,299.50
	TOTAL				₹ 26,202.68
	Add for water charge @ 1 %				₹ 262.03
	TOTAL				₹ 26,464.71
	Add 3% for sundries & contingencies				₹ 793.94
	Total				₹ 27,258.65
	Add for contractor's profit and overheads @ 15%				₹ 4,088.80
	Cost for 21.90 sqm				₹ 31,347.45
	Cost for 1 sqm.				₹ 1,431.39
	Say				₹ 1,431.40

8.10	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board including providing and fixing of frame work made of special section power pressed/ role form G.I. sheet with zinc coating of grade 175 consisting of floor and ceiling channel 50 mm wide having equal flanges of 32 mm and 0.50 mm thick fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.50 mm diameter, 40 mm length and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing 450 mm centre to centre and fixing of boards to either side of frame work by 25 mm drive all screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, joint finisher and two coats of primer suitable for boards as per manufacture's specification and direction of the Engineer-In-Charge all complete.				
8.103.4	66mm overall thickness partition using 8mm thick double skin non- asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (High pressure steam cured) as per IS: 14862, non combustible, non ignitable, fire propagation index and surface spread of flame (as per BS 476 part IV, V, VI & VII), moisture, Termite & Fungus Resistant, with suitable fibre cement screw.				
Code	Description		Unit	Quantity	Rate
	Materials for $6.00 \times 3.65 = 21.90$ sqm. (Partition Panel)				
08001	(i) 8.00 mm thick multipurpose non asbestos fibre cement board. $2 \times 6.00 \times 3.65 = 43.80$ Sqm	sqm	43.80	₹ 313.00	₹ 13,709.40
08207	(ii) 50 mm floor and ceiling channel $2 \times 6.00 = 12.00$ m	metre	12.00	₹ 85.00	₹ 1,020.00
08208	(iii) 48 mm stud- $72 \times 34 \times 36 \times 0.50$ mm	metre	40.15	₹ 95.00	₹ 3,814.25
	$(6.00/0.61) + 1 = 11 \times 3.65 = 40.15$ m				
08170	(iv) Screw 20mm long (drive all screws)	100 Nos	392.00	₹ -	₹ -
	$[(3.65/0.30) + 1] \times 11 \times 2 = 308$ Nos				
	$[(6.00/0.30) + 1] \times 2 \times 2 = 84$ Nos $= 392$ Nos				
08169	(v) Dash fastner $[(6.00/0.61) + 1] \times 2 = 22$ Nos	each	22.00	₹ 30.00	₹ 660.00
05050	(vi) Rawl plug $[(3.65/0.45) + 1] \times 2 = 18$ Nos	each	18.00	₹ 7.00	₹ 126.00
12041	(vii) Plaster of paris, $(88/100) \times 21.90 = 19.27$ Kg	kilogram	19.27	₹ 22.00	₹ 423.94
08136	(viii) Glue $(22/100) \times 21.90 = 4.82$ Kg	kilogram	4.82	₹ 135.00	₹ 650.70
08168	(ix) Paper tape (120m roll)	roll	0.584	₹ 145.00	₹ 84.68
	$(300/100) \times 21.90/120 = 0.584$ Nos.				
08171	(x) Primer $(36/100) \times 21.90 = 7.88$ litre	litre	7.88	₹ 95.00	₹ 748.60
08143	(xi) Galvanised steel bolts & nuts 6mm dia 25mm Long	10 Nos	44.00	₹ 15.00	₹ 66.00
	$11 \times 2 \times 2 = 44$ Nos				

08145	(xii) G.I. Plain washer for seam bolts	100 Nos	44.00	₹ 40.00	₹ 17.60
	Labour for 21.90 sqm.				
0209	Carpernter 1st class $0.30 \times 21.90 = 6.57$ Day	Day	6.57	₹ 425.00	₹ 2,792.25
0210	Carpenter 2nd class $0.13 \times 21.90 = 2.847$ Day	Day	2.847	₹ 380.00	₹ 1,081.86
0227	Painter $0.05 \times 21.90 = 1.905$ Day	Day	1.095	₹ 340.00	₹ 372.30
0203	Beldar $0.35 \times 21.90 = 7.665$ Day	Day	7.665	₹ 300.00	₹ 2,299.50
	TOTAL				₹ 27,867.08
	Add for water charge @ 1 %				₹ 278.67
	TOTAL				₹ 28,145.75
	Add 3% for sundries & contingencies				₹ 844.37
	Total				₹ 28,990.12
	Add for contractor's profit and overheads @ 15%				₹ 4,348.52
	Cost for 21.90 sqm				₹ 33,338.64
	Cost for 1 sqm.				₹ 1,522.31
	Say				₹ 1,522.30
8.10	Providing and fixing PTMT handles with necessary screws etc. complete.				
8.104.1	125x34x24 mm weighing not less than 23 gms.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for ten				
	Materials-				
08221	PTMT handle 125x34x24mm	Each	10.00	₹ 28.00	₹ 280.00
08068	Mild steel screws 25 mm	100 Nos	40.00	₹ 45.00	₹ 18.00
	Labour-				
0210	Carpenter 2nd class	Day	0.06	₹ 380.00	₹ 22.80
	TOTAL				₹ 320.80
	Add for water charge @ 1%				₹ 3.21
	TOTAL				₹ 324.01
	Add 3% for sundries & contingencies				₹ 9.72
	Total				₹ 333.73
	Add for contractor's profit and overheads @ 15%				₹ 50.06
	Cost of 10 Nos				₹ 383.79
	Cost of 1 No				₹ 38.38
	Say				₹ 38.40
8.10	Providing and fixing PTMT handles with necessary screws etc. complete.				
8.104.2	150x34x24 mm weighing not less than 26 gms.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for ten				
	Materials-				
08222	PTMT handle 150x34x24mm	Each	10.00	₹ 32.00	₹ 320.00
08068	Mild steel screws 25 mm	100 Nos	40.00	₹ 45.00	₹ 18.00
	Labour-				
0210	Carpenter 2nd class	Day	0.06	₹ 380.00	₹ 22.80
	TOTAL				₹ 360.80
	Add for water charge @ 1 %				₹ 3.61
	TOTAL				₹ 364.41
	Add 3% for sundries & contingencies				₹ 10.93

	Total				₹	375.34
	Add for contractor's profit and overheads @ 15%				₹	56.30
	Cost of 10 Nos				₹	431.64
	Cost of 1 No				₹	43.16
	Say				₹	43.20
8.11	Providing and fixing PTMT Butt hinges with necessary screws etc. complete.					
8.105.1	75x60x10 mm fitted with 5.5 mm dia M.S.Bright Bar Rod weighing not less than 34 gms.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for ten					
	Materials-					
08223	PTMT butt hinges 75x60x10mm	Each	10.00	₹ 40.00	₹	400.00
08067	Mild steel screws 30 mm	100 Nos	60.00	₹ 50.00	₹	30.00
	Labour-					
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹	53.20
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	510.20
	Add for water charge @ 1 %				₹	5.10
	TOTAL				₹	515.30
	Add 3% for sundries & contingencies				₹	15.46
	Total				₹	530.76
	Add for contractor's profit and overheads @ 15%				₹	79.61
	Cost of 10Nos				₹	610.37
	Cost of 1 No				₹	61.04
	Say				₹	61.00
8.11	Providing and fixing PTMT Butt hinges with necessary screws etc. complete.					
8.105.2	100x75x10 mm fitted with 5.5 mm dia MSBright Bar Rod weighing not less than 53gms.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for ten					
	Materials-					
08224	PTMT butt hinges 100x75x 10mm	Each	10.00	₹ 56.00	₹	560.00
08066	Mild steel screws 40 mm	100 Nos	80.00	₹ 60.00	₹	48.00
	Labour-					
0210	Carpenter 2nd class	Day	0.14	₹ 380.00	₹	53.20
0203	Beldar	Day	0.09	₹ 300.00	₹	27.00
	TOTAL				₹	688.20
	Add for water charge @ 1%				₹	6.88
	TOTAL				₹	695.08
	Add 3% for sundries & contingencies				₹	20.85
	Total				₹	715.93
	Add for contractor's profit and overheads @ 15%				₹	107.39
	Cost of 10Nos				₹	823.32
	Cost of 1 No				₹	82.33
	Say				₹	82.30
8.11	Providing and fixing PTMT Tower Bolts with 12 mm one piece rod inside and necessary screws etc., complete.					
8.106.1	152x42x18 mm weighing not less than 60 gms.					
Code	Description	Unit	Quantity	Rate	Rate	

	Details of cost for ten				
	Materials-				
08225	PTMT Tower bolt 152x42x18mm	Each	10.00	₹ 65.00	₹ 650.00
08067	Mild steel screws 30 mm	100 Nos	60.00	₹ 50.00	₹ 30.00
	Labour-				
0210	Carpenter 2nd class	Day	0.08	₹ 380.00	₹ 30.40
	TOTAL				₹ 710.40
	Add for water charge @ 1 %				₹ 7.10
	TOTAL				₹ 717.50
	Add 3% for sundries & contingencies				₹ 21.53
	Total				₹ 739.03
	Add for contractor's profit and overheads @ 15%				₹ 110.85
	Cost of IONos				₹ 849.88
	Cost of 1 No				₹ 84.99
	Say				₹ 85.00
8.11	Providing and fixing PTMT Tower Bolts with 12 mm one piece rod inside and necessary screws etc., complete.				
8.106.2	202x42x18 mm weighing not less than 78 gms.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for ten				
	Materials-				
08226	PTMT Tower bolt 202x42x 18mm	Each	10.00	₹ 80.00	₹ 800.00
08067	Mild steel screws 30 mm	100 Nos	80.00	₹ 50.00	₹ 40.00
	Labour-				
0210	Carpenter 2nd class	Day	0.10	₹ 380.00	₹ 38.00
	TOTAL				₹ 878.00
	Add for water charge @ 1%				₹ 8.78
	TOTAL				₹ 886.78
	Add 3% for sundries & contingencies				₹ 26.60
	Total				₹ 913.38
	Add for contractor's profit and overheads @15%				₹ 137.01
	Cost of IONos				₹ 1,050.39
	Cost of 1 No				₹ 105.04
	Say				₹ 105.00
8.11	Providing and fixing PTMT door catcher of length 72 mm and dia. of 42 mm with suitable washers weighing not less than 33 gms.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for ten				
	Materials-				
08227	PTMT door catcher 72x42mm	Each	10.00	₹ 27.00	₹ 270.00
08068	Mild steel screws 25 mm	100 Nos	20.00	₹ 45.00	₹ 9.00
	Labour-				
0209	Carpenter 1st class	Day	0.03	₹ 425.00	₹ 12.75
	TOTAL				₹ 291.75
	Add for water charge @ 1%				₹ 2.92
	TOTAL				₹ 294.67
	Add 3% for sundries & contingencies				₹ 8.84
	Total				₹ 303.51
	Add for contractor's profit and overheads @15%				₹ 45.53
	Cost of 10 Nos				₹ 349.04

	Cost of 1 No				₹	34.90
	Say				₹	34.90
8.11	Providing and fixing wooden moulded corner beading of triangular shape to the junction of panelling etc. with iron screws, plugs and priming coat on unexposed surface etc. complete Gamair wood.					
8.108.1	50x50 mm (base and height).					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for beading = 5.00 m					
	MATERIALS					
	Gamair wood in planks 5.00 x 0.05 x 0.05/2 = 0.00625 cum					
	Add wastage @10% 0.00063 cum	=				
	total 0.00688 cum	=				
	say 6.88 cudm					
08283	Gamair Wood	10 cudm	6.88	₹ 350.00	₹	240.80
0473	Carriage of Timber	cum	0.00688	₹ 80.65	₹	0.55
08066	Mild steel screws 40 mm	100 Nos	6.00	₹ 60.00	₹	3.60
	Priming coat					
	Area 5.0 x (0.05 +0.05) = 0.50 sqm (A) Priming coat (Rate as per item no 12.31.1)	sqm	0.50	₹ 31.90	₹	15.95
	Labour:-					
	For plaining, fixing & making design					
0209	Carpenter 1st class	Day	0.75	₹ 425.00	₹	318.75
	TOTAL				₹	579.65
	Add 1% for water charges				₹	5.80
	TOTAL				₹	585.45
	Add 3% for sundries & contingencies				₹	17.56
	Total				₹	603.01
	Add 15% for contractor's profit and overhead's				₹	90.45
	Cost for 5 metre				₹	693.46
	Cost for 1 metre				₹	138.69
	Say				₹	138.70
8.11	Providing and fixing gamair wood lipping/ moulded beading or Taj beading of size 18X5mm fixed with wooden adhesive like fevicol etc and screws/ nails on the edges of the prelaminated particle board as per direction of Engineer-in-charge.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 10.00 m					
	MATERIALS					
08286	Gamair wood lipping/ moulded beading or Taj beading of size 18 X 5	Meter	10.00	₹ 15.00	₹	150.00
	LABOUR					
0210	Carpenter 2nd class	Day	0.25	₹ 380.00	₹	95.00
0203	Beldar	Day	0.25	₹ 300.00	₹	75.00
	TOTAL				₹	320.00
	Add 1 % for water charges				₹	3.20
	TOTAL				₹	323.20

	Add 3% for sundries & contingencies				₹	9.70
	Total				₹	332.90
	Add 15% for contractor's profit and overheads				₹	49.94
	Cost for 10.00m				₹	382.84
	Cost for 1.00m				₹	38.28
	Say				₹	38.30
8.11	Providing and fixing bright finished 100mm mortice lock with 6 levers without pair of handles for aluminium door with necessary screws etc complete (Best make of approved quality) as per direction of Engineer-in-charge.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 1 no.					
08268	100 mm mostice lock with 6 levers for aluminium door.	each	1.00	₹ 365.00	₹	365.00
	LABOUR					
0209	Carpenter 1st class	Day	0.13	₹ 425.00	₹	55.25
	TOTAL				₹	420.25
	Add 1% for water charges				₹	4.20
	TOTAL				₹	424.45
	Add 3% for sundries & contingencies				₹	12.73
	Total				₹	437.18
	Add 15% for contractor's profit and overheads				₹	65.58
	Cost for 1 no				₹	502.76
	Say				₹	502.80
8.11	Providing and fixing magnetic catcher in cupboard / ward robe shutters including fixing with necessary screws etc. complete (Best make of approved quality.)					
8.111.1	Triple strip vertical type.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 1 No.					
	MATERIALS					
08266	Magenatic catcher triple strip verticle type.	each	1.00	₹ 25.00	₹	25.00
	TOTAL				₹	25.00
	Add 1% for water charges				₹	0.25
	TOTAL				₹	25.25
	Add 3% for sundries & contingencies				₹	0.76
	Total				₹	26.01
	Add 15% for contractor's profit and overheads				₹	3.90
	Cost for 1 No.				₹	29.91
	Say				₹	29.90
8.11	Providing and fixing magnetic catcher in cupboard / ward robe shutters including fixing with necessary screws etc. complete (Best make of approved quality.)					
8.111.2	Double strip (horizontal type).					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 1 No.					
	MATERIALS					
08267	Magenatic catcher double strip horizontal type.	each	1.00	₹ 20.00	₹	20.00
	TOTAL				₹	20.00
	Add 1% for water charges				₹	0.20
	TOTAL				₹	20.20

	Add 3% for sundries & contingencies				₹ 0.61
	Total				₹ 20.81
	Add 15% for contractor's profit and overheads				₹ 3.12
	Cost for 1 No.				₹ 23.93
	Say				₹ 23.90
8.11	Providing and fixing powder coated telescopic drawer channels 300mm long with necessary screws etc. complete as per directions of Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 10 sets.				
	MATERIALS				
08257	Telescopic drawer channels 300mm long.	set	10.00	₹ 165.00	₹ 1,650.00
	TOTAL				₹ 1,650.00
	Add 1 % for water charges				₹ 16.50
	TOTAL				₹ 1,666.50
	Add 3% for sundries & contingencies				₹ 50.00
	Total				₹ 1,716.50
	Add 15% for contractor's profit and overheads				₹ 257.48
	Cost for 10 sets				₹ 1,973.98
	Cost for 1 sets				₹ 197.40
	Say				₹ 197.40
8.11	Providing and fixing sliding arrangement in racks/ cupboards/cabinets shutter by P/F stainless steel rollers to run inside C or E aluminium channel section (The payment of C or E channel shall be made separately)				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 No.				
	MATERIALS				
08258	Stainless steel roller for sliding arrangement in racks/ cupboards/ cabinets shutter.	each	1.00	₹ 12.00	₹ 12.00
	TOTAL				₹ 12.00
	Add 1% for water charges				₹ 0.12
	TOTAL				₹ 12.12
	Add 3% for sundries & contingencies				₹ 0.36
	Total				₹ 12.48
	Add 15% for contractor's profit and overheads				₹ 1.87
	Cost for I No.				₹ 14.35
	Say				₹ 14.40
8.11	Providing and fixing factory made UPVC door frame made of UPVC extruded, section having an overall dimension, as below (tolerance +/- 1mm) with wall thickness 2.0mm+/- 0.2mm. corners of the door frame to be jointed with galvanized brackets and stainless screws, joint mitred and plastic wilded. The hinge side vertical of the frames reinforced by galvanized MS tube of size 19 × 19 mm and 1 mm +/- 0.1 mm wall thickness and 3 nos stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-In-Charge.				
8.114.1	Extruded section Profile size 48x40 mm.				
Code	Description	Unit	Quantity	Rate	Rate
	Detail of cost for 5 metre				
	MATERIALS				

08236	48 mm × 40 mm × 2 mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	5.00	₹ 185.00	₹ 925.00
	LABOUR				
0208	Carpenter (average)	Day	0.15	₹ 400.00	₹ 60.00
0203	Beldar	Day	0.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 1,030.00
	Add 1% for water charges				₹ 10.30
	TOTAL				₹ 1,040.30
	Add 3% for sundries & contingencies				₹ 31.21
	Total				₹ 1,071.51
	Add 15% for contractor's profit and overheads				₹ 160.73
	Cost of 5 metre				₹ 1,232.24
	Cost of 1.00 metre				₹ 246.45
	Say				₹ 246.50
8.11	Providing and fixing factory made UPVC door frame made of UPVC extruded, section having an overall dimension, as below (tolerance +/- 1mm) with wall thickness 2.0mm +/- 0.2mm. corners of the door frame to be jointed with galvanized brackets and stainless screws, joint mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized MS tube of size 19 × 19 mm and 1 mm +/- 0.1 mm wall thickness and 3 nos stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-In-Charge.				
8.114.2	Extruded section Profile size 42x50 mm.				
Code	Description	Unit	Quantity	Rate	Rate
	Detail of cost for 5 metre				
	MATERIALS				
08259	50 mm × 42 mm × 1.5 mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	5.00	₹ 175.00	₹ 875.00
	LABOUR				
0208	Carpenter (average)	Day	0.15	₹ 400.00	₹ 60.00
0203	Beldar	Day	0.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 980.00
	Add 1 % for water charges				₹ 9.80
	TOTAL				₹ 989.80
	Add 3% for sundries & contingencies				₹ 29.69
	Total				₹ 1,019.49
	Add 15% for contractor's profit and overheads				₹ 152.92
	Cost of 5 metre				₹ 1,172.41
	Cost of 1.00 metre				₹ 234.48
	Say				₹ 234.50
8.12	Providing and fixing to existing door frames.				

8.115.1	24 mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24 mm and wall thickness 2 mm $\pm$ 0.2 mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of M.S. galvanised /plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserying galvanised MS tube of size 20x20 mm and 1 mm $\pm$ 0.1 mm wall thickness. The lock rail made up of "H" Section, a UPVC hollow section of size 100x24 mm and 2 mm $\pm$ 0.2 mm wall thickness fixed to the shutter styles by means of plastic /galvanised MS "U" cleats. The shutter frame filled with a UPVC multi-chambered single panel of size not less than 620 mm, having overall thickness of 20 mm and 1 mm $\pm$ 0.1 mm wall thickness. The panels filled vertically and tie bar at two places by inserting horizontaly 6 mm galvanised MS rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-In-Charge. (for W.C. and Bathroom door shutter).				
Code	Description	Unit	Quantity	Rate	Rate
	Detail of cost for 2.38 sqm				
	one door shutter 2.20 x 1.08m				
	MATERIALS				
08231	24 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish i/c carriage.	sqm	2.38	₹ 1,400.00	₹ 3,332.00
	LABOUR				
0208	Carpenter (average)	Day	0.400	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 3,612.00
	Add 1 % for water charges				₹ 36.12
	TOTAL				₹ 3,648.12
	Add 3% for sundries & contingencies				₹ 109.44
	Total				₹ 3,757.56
	Add 15% for contractor's profit and overheads				₹ 563.63
	Cost of 2.38 sqm				₹ 4,321.19
	Cost of 1.00 sqm				₹ 1,815.63
	Say				₹ 1,815.60
8.12	Providing and fixing to existing door frames.				
8.115.2	30mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a UPVC profile section of size 30mm x 60mm and wall thickness 2mm $\pm$ 0.2mm with inbuilt decorative moulding edging on one side. The styles and rails with plastic brackets of size 75x220 mm mitred and welded at the corners. The styles of the shutter reinforced by inserting galvanised MS tube of size 25x20 mm and 1 mm $\pm$ 0.1 mm wall thickness. The lock rail made up of "H" Section, a UPVC profile section of size 30x100 mm and 2 mm $\pm$ 0.2 mm wall thickness welded to the shutter style with a UPVC profile section single panel of size not less than 620 mm, having overall thickness of 20 mm and 1 mm $\pm$ 0.1 mm wall thickness with 20 mm panel beading of suitable size/Glass (4 mm thick plain glass)/ louver section, louver frame of suitable size, complete as per manufacturer's specification and direction of Engineer-In-Charge. (for W.C. and Bathroom door shutter).				
Code	Description	Unit	Quantity	Rate	Rate
	Detail of cost for 2.38 sqm.				
	one door shutter 2.20 x1.08 m = 2.38 sqm				
	MATERIALS				

08232	30 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	2.38	₹ 1,520.00	₹ 3,617.60
	LABOUR				
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	Total				₹ 3,897.60
	Add 1% for water charges				₹ 38.98
	TOTAL				₹ 3,936.58
	Add 3% for sundries & contingencies				₹ 118.10
	Total				₹ 4,054.68
	Add 15% for contractor's profit and overheads.				₹ 608.20
	Cost of 2.38 sqm				₹ 4,662.88
	Cost of 1.00 sqm				₹ 1,959.19
	Say				₹ 1,959.20
8.12	Providing and fixing to existing door frames.				
8.115.3	25mm thick PVC flush door shutters upto 737mm width of colour and shade as approved by Engineer-in-charge made out of a one piece Multi chamber extruded PVC section of the size of 762mm X 25mm or less as per requirement with an average wall thickness of 1 mm $\pm$ 0.3 mm . PVC foam end cap of size 23 $\times$ 10 mm are provided on both vertical edges to ensure the overall thickness of 25 mm . An MS tube having dimensions 19mm $\times$ 19 mm is insetted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top & Bottom edges of the shutter are covered with an end-cap of the size 25 $\times$ 11 mm . Door shutter shall be reinforced with special polymeric reinforcements as per manufacturers' specification and drawing to take up necessary hardware and fixtures complete. Stickers indicating the locations of hardware will be pasted at appropriate places.				
Code	Description	Unit	Quantity	Rate	Rate
	Detail of cost for 2.38 sqm				
	one door shutter 2.20x1.08m = 2.38 sqm				
	MATERIALS				
08260	25mm thick factory made PVC flush door shutter.	sqm	2.38	₹ 1,700.00	₹ 4,046.00
	LABOUR				
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 4,326.00
	Add 1% for water charges				₹ 43.26
	TOTAL				₹ 4,369.26
	Add 3% for sundries & contingencies				₹ 131.08
	Total				₹ 4,500.34
	Add 15% for contractor's profit and overheads				₹ 675.05
	Cost of 2.38 sqm				₹ 5,175.39
	Cost of 1.00 sqm				₹ 2,174.53
	Say				₹ 2,174.50

8.12	Providing and fixing factory made P.V.C. door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and joined with 2 Nos. of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm MS square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame . The door frame to be fixed to the wall using MS screws of 65/100 mm size complete as per manufacturers' specification and direction of Engineer-In-Charge.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for one door frame of 5 metre				
	Materials-				
08237	Factory made door frame PVC extruded sheet i/c carriage.	metre	5.00	₹ 350.00	₹ 1,750.00
	Labour-				
0208	Carpenter (average)	Day	0.15	₹ 400.00	₹ 60.00
0203	Beldar	Day	0.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 1,855.00
	Add for water charge @ 1 %				₹ 18.55
	TOTAL				₹ 1,873.55
	Add 3% for sundries & contingencies				₹ 56.21
	Total				₹ 1,929.76
	Add for contractor's profit and overheads @15%				₹ 289.46
	Cost of 5 metres				₹ 2,219.22
	Cost of 1 metre				₹ 443.84
	Say				₹ 443.80
8.12	Providing and fixing to existing door frames.				
8.117.1	30mm thick factory made solid panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for stiles, top & bottom rails. M.S .frame shall have a coat of steel primers of approved make and manufacture M.S. frame covered with 5mm thick heat moulded PVC 'C channel of size 30mm thickness, 110mm width out of which 90mm shall be flat and 20mm shall be tapered in 45 degree angle on either side forming stiles; and 5mm thick, 110mm wide PVC sheet out of which 90mm shall be flat and 20mm shall be tapered on the inner side to form top and bottom rail and 130mm wide PVC sheet out of which 90mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2) thick, 20mm wide cross PVC sheet shall be provided as gap insert for top rail & bottom rail. Panelling of 5mm thick PVC sheet to be fitted in the M.S. frame welded/ sealed to the stiles & rails with 7mm (5mm +2mm) thick x 15mm wide PVC sheet bending on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacture's specification & drawing.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of one shutter 2.20x1.08m= 2.38 sqm				
	Materials-				
08233	Factory made shutter i/c carriage	sqm	2.38	₹ 2,275.00	₹ 5,414.50
08238	Powder coated M.S. butt hinges 100 mm x 58 mm x 1.9 mm	10 Nos	4.00	₹ 100.00	₹ 40.00
08066	M.S. screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour-				

0208	Carpenter (average)	Day	0.40	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 5,766.10
	Add for water charge @ 1%				₹ 57.66
	TOTAL				₹ 5,823.76
	Add 3% for sundries & contingencies				₹ 174.71
	Total				₹ 5,998.47
	Add for contractor's profit and overheads @15%				₹ 899.77
	Cost of 2.38 sqm				₹ 6,898.24
	Cost per sqm				₹ 2,898.42
	Say				₹ 2,898.40
8.12	Providing and fixing to existing door frames.				
8.117.2	30mm thick factory made solid both side prelam panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles, top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5mm thick heat moulded prelam PVC 'C channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle on either side forming stiles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, button and lock rails shall be provided either side of the panel. 10mm (5mm x 2) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, panelling of 5mm thick both side Prelam PVC sheet to be fitted in the M.S. frame welded/ sealed to the stiles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge. manufacturer's specification & drawing.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of one shutter 2.20x1.08m = 2.38 sqm				
	Materials-				
08234	Factory made PVC shutter i/c carriage	sqm	2.38	₹ 2,685.00	₹ 6,390.30
08238	Powder coated M.S. Butt hinges 100 mm × 58 mm × 10 mm	10 Nos	4.00	₹ 100.00	₹ 40.00
08066	M.S. screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour-				
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 6,741.90
	Add for water charge @ 1 %				₹ 67.42
	TOTAL				₹ 6,809.32
	Add 3% for sundries & contingencies				₹ 204.28
	Total				₹ 7,013.60
	Add for contractor's profit and overheads @15%				₹ 1,052.04
	Cost of 2.38 sqm				₹ 8,065.64
	Cost per sqm				₹ 3,388.92

	Say				₹	3,388.90
8.12	Providing and fixing Fiber Glass Reinforced plastic (FRP) Door Frames of cross-section 90mm x 45mm having single rebate of 32mm x 15mm to receive shutter of 30mm thickness .The laminate shall be molded with fire resistant grade unsaturated polyester resin and chopped mat .Doorframe laminate shall be 2mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fibreglass from all sides. MS stay shall be provided at the bottom to steady the frame.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for one door frame of 5 metre					
	Materials-					
08261	Factory made glass reinforced plastic door frame 90 × 45 mm i/c carriage.	metre	5.00	₹ 340.00	₹	1,700.00
	Labour-					
0208	Carpenter (average)	Day	0.15	₹ 400.00	₹	60.00
0203	Beldar	Day	0.15	₹ 300.00	₹	45.00
	TOTAL				₹	1,805.00
	Add for water charge @ 1%				₹	18.05
	TOTAL				₹	1,823.05
	Add 3% for sundries & contingencies				₹	54.69
	Total				₹	1,877.74
	Add for contractor's profit and overheads @15%				₹	281.66
	Cost of 5 metres				₹	2,159.40
	Cost of 1 metre				₹	431.88
	Say				₹	431.90
8.12	Providing and fixing to existing door frames.					
8.119.1	30 mm thick Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture, made with fire - retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate for forming hollow rails and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5mm thick FRP laminate for panels confirming to TADS 6: 1993 and / or IS: 14856 - 2000 including fixing to frames.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost of one shutter 2.20x1.08m =2.38 Sqm					
	Materials-					
08262	30 mm thick factory made glass fiber reinforced plastic panel door shutter i/c carriage.	sqm	2.38	₹ 1,680.00	₹	3,998.40
08238	Powder coated M.S. butt hinges 100 mm × 58 mm × 1.9 mm	10 Nos	4.00	₹ 100.00	₹	40.00
08066	M.S. screws 40mm	100 Nos	48.00	₹ 60.00	₹	28.80
08069	M.S. screws 20mm	100 Nos	8.00	₹ 35.00	₹	2.80
	Labour-					
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹	160.00

0203	Beldar	Day	0.40	₹	300.00	₹	120.00
	TOTAL					₹	4,350.00
	Add for water charge @ 1%					₹	43.50
	TOTAL					₹	4,393.50
	Add 3% for sundries & contingencies					₹	131.81
	Total					₹	4,525.31
	Add for contractor's profit and overheads @15%					₹	678.80
	Cost of 2.38 sqm					₹	5,204.11
	Cost per sqm					₹	2,186.60
	Say					₹	2,186.60
8.12	Providing and fixing to existing door frames.						
8.119.2	30mm thick fibreglass reinforced plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3mm thick FRP laminate all around, with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUF) / Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P. laminate conforming to table - 3 of IS: 14856 : 2000, complete as per direction of Engineer-in-charge.						
Code	Description	Unit	Quantity	Rate	Rate		
	Details of cost of one shutter 2.20x1.08m =2.38 Sqm						
	Materials-						
08278	30 mm thick factory made glass fiber reinforced plastic flush door shutter i/c carriage.	sqm	2.38	₹ 2,000.00	₹		4,760.00
08238	Powder coated M.S. butt hinges 100 mm × 58 mm × 1.9 mm	10 Nos	4.00	₹ 100.00	₹		40.00
08066	M.S. screws 40mm	100 Nos	48.00	₹ 60.00	₹		28.80
08069	M.S. screws 20mm	100 Nos	8.00	₹ 35.00	₹		2.80
	Labour-						
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹		160.00
0203	Beldar	Day	0.40	₹ 300.00	₹		120.00
	TOTAL					₹	5,111.60
	Add for water charge @ 1 %					₹	51.12
	TOTAL					₹	5,162.72
	Add 3% for sundries & contingencies					₹	154.88
	Total					₹	5,317.60
	Add for contractor's profit and overheads @15%					₹	797.64
	Cost of 2.38 sqm					₹	6,115.24
	Cost per sqm					₹	2,569.43
	Say					₹	2,569.40
8.12	Providing and fixing factory made door frame (single rebate) made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 60mm width & 30mm thickness and shall be fixed to wall as per instructions of Engineer-In-Charge using 100x8 sheet metal CSK screws.						
Code	Description	Unit	Quantity	Rate	Rate		
	Details of cost for one door frame of 5 metre						
	Materials-						

08263	Factory made solid PVC door frame 60 × 30mm i/c carriage.	metre	5.00	₹ 315.00	₹ 1,575.00
	Labour-				
0208	Carpenter (average)	Day	0.15	₹ 400.00	₹ 60.00
0203	Beldar	Day	0.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 1,680.00
	Add for water charge @ 1 %				₹ 16.80
	TOTAL				₹ 1,696.80
	Add 3% for sundries & contingencies				₹ 50.90
	Total				₹ 1,747.70
	Add for contractor's profit and overheads @15%				₹ 262.16
	Cost of 5 metres				₹ 2,009.86
	Cost of 1 metre				₹ 401.97
	Say				₹ 402.00
8.12	Providing and fixing 28 mm thick door shutter made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as vertical & horizontal styles. Joints are made using solvent adhesive and GI 'C' sections (39mm x 19mm x 0.6mm thick) or M S pipe (40mm x 20mm) stiffener frame insert & telescopic polymeric 'L' corners .The panel shall be filled with 3mm thick high - pressure compact laminate as per manufacturer's specifications and directions of the Engineer-in-charge, cover moulding shall be provided for covering fixing screws and elegant look.(for W.C. bathroom door shutter).				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost of one shutter 2.20x1.08m =2.38 Sqm				
	Materials-				
08264	28mm factory made solid PVC panel door shutter i/c carriage.	sqm	2.38	₹ 2,000.00	₹ 4,760.00
08238	Powder coated M.S. butt hinges 100 mm × 58 mm × 1.9 mm	10 Nos	4.00	₹ 100.00	₹ 40.00
08066	M.S. screws 40mm	100 Nos	48.00	₹ 60.00	₹ 28.80
08069	M.S. screws 20mm	100 Nos	8.00	₹ 35.00	₹ 2.80
	Labour-				
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 5,111.60
	Add for water charge @ 1 %				₹ 51.12
	TOTAL				₹ 5,162.72
	Add 3% for sundries & contingencies				₹ 154.88
	Total				₹ 5,317.60
	Add for contractor's profit and overheads @15%				₹ 797.64
	Cost of 2.38 sqm				₹ 6,115.24
	Cost per sqm				₹ 2,569.43
	Say				₹ 2,569.40
8.12	Providing and fixing PVC rigid foam sheet 1mm thick on existing door shutters (bathroom and W.C. doors) using synthetic rubber based adhesive.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1.0 × 0.3 m = 0.30 sqm				
	Materials-				

08235	PVC rigid foam sheet 1mm thick = 0.30 sqm				
	Add wastage @ 10% = 0.03 sqm				
	Total = 0.33 sqm	sqm	0.33	₹ 210.00	₹ 69.30
	Labour-				
0209	Carpenter 1 st class	Day	0.11	₹ 425.00	₹ 46.75
0203	Beldar	Day	0.14	₹ 300.00	₹ 42.00
0225	Mistry	Day	0.02	₹ 380.00	₹ 7.60
	TOTAL				₹ 165.65
	Add for water charge @ 1 %				₹ 1.66
	TOTAL				₹ 167.31
	Add 3% for sundries & contingencies				₹ 5.02
	Total				₹ 172.33
	Add for contractor's profit and overheads @15%				₹ 25.85
	Cost of 0.30 sqm				₹ 198.18
	Cost per sqm				₹ 660.60
	Say				₹ 660.60
8.12	Providing and fixing 12mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25mm to 40mm thick.				
8.123.1	Marine plywood conforming to IS: 710				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for shutters of a door with 2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area = 4 × 45.1 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Plywood 4 × 47.2 × 38.65 cm = 0.73 sqm+				
	Add for wastage @ 10% = 0.07 sqm.				
	Total = 0.80 sqm.				
08274	12mm thick marine plywood conforming to IS:710	sqm	0.80	₹ 730.00	₹ 584.00
	Labour:				
0209	Carpenter 1 st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 826.25
	Add 1% for water charges				₹ 8.26
	TOTAL				₹ 834.51
	Add 3% for sundries & contingencies				₹ 25.04
	Total				₹ 859.55
	Add 15% for contractor's profit and overheads				₹ 128.93
	Cost of 0.67 sqm.				₹ 988.48
	Cost of 1 sqm.				₹ 1,475.34
	Say				₹ 1,475.30

8.12	Providing and fixing 12mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25mm to 40mm thick.				
8.123.2	Fire retardant plywood conforming to IS: 5509.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for shutters of a door with 2/3rd panelling 200 × 108 cm = 2.16 sqm.				
	Panel area = 4 × 45.1 × 36.55 cm = 0.67 sqm.				
	Materials:				
	Plywood 4 × 47.2 × 38.65 cm = 0.73 sqm+				
	Add for wastage @ 10% = 0.07 sqm.				
	Total = 0.80 sqm.				
08275	12mm thick fire retardant plywood conforming to IS: 5509.	sqm	0.80	₹ 840.00	₹ 672.00
0473	Carriage of Plywood Labour:	Cum	0.0096	₹ 80.65	₹ 0.77
0209	Carpenter 1 st class	Day	0.57	₹ 425.00	₹ 242.25
	TOTAL				₹ 915.02
	Add 1 % for water charges				₹ 9.15
	TOTAL				₹ 924.17
	Add 3% for sundries & contingencies				₹ 27.73
	Total				₹ 951.90
	Add 15% for contractor's profit and overheads				₹ 142.79
	Cost of 0.67 sqm.				₹ 1,094.69
	Cost of 1 sqm.				₹ 1,633.87
	Say				₹ 1,633.90
8.12	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality.				
8.124.1	1.5 mm thick.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 5.00 sqm				
	MATERIALS				
	Decorative laminate = 5.00 sqm				
	Add wastage @ 10% = 0.50 sqm				
	Total = 5.50 sqm				
08276	1.5mm thick decorative laminated sheet	sqm	5.50	₹ 550.00	₹ 3,025.00
	LABOUR:-				
0209	Carpenter 1 st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 3,387.50
	Add for water charges @ 1%				₹ 33.88
	TOTAL				₹ 3,421.38
	Add 3% for sundries & contingencies				₹ 102.64
	Total				₹ 3,524.02

	Add for contractors profit and overheads @15%				₹ 528.60
	Cost for 5.00 sqm				₹ 4,052.62
	Cost for 1 sqm				₹ 810.52
	Say				₹ 810.50
8.12	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality.				
8.124.2	1.0 mm thick.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 5.00 sqm				
	MATERIALS				
	Decorative laminate = 5.00 sqm				
	Add wastage @ 10% = 0.50 sqm				
	Total = 5.50 sqm				
08277	1.0mm thick decorative laminated sheet	sqm	5.50	₹ 360.00	₹ 1,980.00
	LABOUR:-				
0209	Carpenter 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 2,342.50
	Add for water charges @ 1 %				₹ 23.43
	TOTAL				₹ 2,365.93
	Add 3% for sundries & contingencies				₹ 70.98
	Total				₹ 2,436.91
	Add for contractors profit and overheads @15%				₹ 365.54
	Cost for 5.00 sqm				₹ 2,802.45
	Cost for 1 sqm				₹ 560.49
	Say				₹ 560.50
8.13	Providing and fixing factory made Fiberglass Reinforced plastics (F.R.P.) chajja 4mm thick of required colour, size and design made by Resin Transfer Moulding (RTM) Machine Technology, resulting in void free compact laminate in single piece, having smooth gradual slope curvature for easy drainage of water and duly reinforced by 2nos. vertically and 1nos. horizontally 50x2mm thick M.S. flat with 12mm in built hole for grouting on the existing wall along with the 50mm flanges duly inserted and sealed in the wall complete in one single piece casted monolithically, including all necessary fittings. The FRP Chajja should be manufactured using unsaturated Polyester resin as per IS: 6746 duly reinforced with fibre glass chopped strand mat (CSM) as per IS: 11551 complete with protective Gel coat U/V coating on Top for complete resistance from the extreme of temperature, weather & sunlight.				
Code	Description	Unit	Quantity	Rate	Rate
	Detail of cost for a chajja 0.90 × 0.60 = 0.54 Sqm				
	MATERIALS				
08265	Fiber glass reinforced plastic chajja including accessories.	Sqm	0.54	₹ 3,500.00	₹ 1,890.00
	TOTAL				₹ 1,890.00
	Add 1% for water charges				₹ 18.90
	Total				₹ 1,908.90
	Add 3% for sundries & contingencies				₹ 57.27
	Total				₹ 1,966.17
	Add 15% for contractor's profit and overheads				₹ 294.93

	Cost for 0.54 sqm				₹	2,261.10
	Cost for 1 sqm				₹	4,187.22
	Say				₹	4,187.20
8.13	Providing and fixing cup board shutters 25mm thick, with Pre-laminated flat pressed three layer particle board or graded wood particle board IS: 12823 marked exterior grade (Grade I Type II) having one side decorative lamination and other side balancing lamination including IInd class teak wood lipping of 25mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of the Engineer-in-Charge.					
Code	Description	Unit	Quantity	Rate		Rate
	Details of cost for one shutter 2.20 × 1.00 m = 2.20 Sqm					
	Materials					
08199	25 mm thick cup board shutter (prelaminated)	Sqm	2.20	₹	850.00	₹ 1,870.00
08254	1mm thick 35mm wide bright finished stainless steel piano hinges .	metre	4.40	₹	55.00	₹ 242.00
08103	Screws 25 mm long	100 Nos	125.00	₹	56.00	₹ 70.00
	Labour					
0209	Carpenter 1 st class	Day	0.50	₹	425.00	₹ 212.50
0203	Beldar	Day	0.50	₹	300.00	₹ 150.00
0225	Mistry	Day	0.07	₹	380.00	₹ 26.60
08198	Add for wooden lipping 25 mm wide x 12 mm thick	metre	7.00	₹	55.00	₹ 385.00
	TOTAL					₹ 2,956.10
	Add 1 % for water charges					₹ 29.56
	TOTAL					₹ 2,985.66
	Add 3% for sundries & contingencies					₹ 89.57
	Total					₹ 3,075.23
	Add 15% for contractor's profit and overheads					₹ 461.28
	Cost for 2.20sqm.					₹ 3,536.51
	Cost per sqm.					₹ 1,607.50
	Say					₹ 1,607.50
8.13	Providing and fixing cup board shutters with 25mm thick veneered particle board IS : 3097 marked exterior grade (Grade I) of approved make including IInd class teak wood lipping of 25mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of Engineer-in-Charge.					
8.127.1	With decorative veneering on one side and commercial veering on other side.					
Code	Description	Unit	Quantity	Rate		Rate
	Details of cost for one shutter 2.20 × 1.00 m = 2.20 sqm.					
	Materials					
08197	25 mm thick cup board shutter	sqm	2.20	₹	490.00	₹ 1,078.00
08003	Extra for teak veneering on one side and commercial veneering on other side	sqm	2.20	₹	292.00	₹ 642.40

08254	1mm thick 35mm wide bright finished stainless steel piano hinges.	metre	4.40	₹ 55.00	₹ 242.00
08103	Screws 25 mm long	100 Nos	125.00	₹ 56.00	₹ 70.00
	Labour				
0209	Carpenter 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
0225	Mistry	Day	0.07	₹ 380.00	₹ 26.60
08198	Add for wooden lipping 25 mm wide × 12 mm thick	metre	7.00	₹ 55.00	₹ 385.00
	TOTAL				₹ 2,806.50
	Add 1 % for water charges				₹ 28.07
	TOTAL				₹ 2,834.57
	Add 3% for sundries & contingencies				₹ 85.04
	Total				₹ 2,919.61
	Add 15% for contractor's profit and overheads				₹ 437.94
	Cost for 2.20sqm.				₹ 3,357.55
	Cost per sqm.				₹ 1,526.16
	Say				₹ 1,526.20
8.13	Providing and fixing cup board shutters with 25mm thick veneered particle board IS : 3097 marked exterior grade (Grade I) of approved make including IInd class teak wood lipping of 25mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of Engineer-in-Charge.				
8.127.2	With non decorative veneering on both sides.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for one shutter 2.20 ×				
	Materials				
08197	25 mm thick particle board	sqm	2.20	₹ 490.00	₹ 1,078.00
08004	Extra for commercial veneering on both sides	sqm	2.20	₹ 185.00	₹ 407.00
08254	1mm thick 35mm wide bright finished stainless steel piano hinges.	metre	4.40	₹ 55.00	₹ 242.00
08103	Screws 25 mm long	100 Nos	125.00	₹ 56.00	₹ 70.00
	Labour				
0209	Carpenter 1 st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
0225	Mistry	Day	0.07	₹ 380.00	₹ 26.60
08198	Add for wooden lipping 25 mm wide x 12 mm	metre	7.00	₹ 55.00	₹ 385.00
	thick				₹ 2,571.10
	TOTAL				₹ 25.71
	Add 1% for water charges				₹ 2,596.81
	TOTAL				₹ 77.90
	Add 3% for sundries & contingencies				₹ 2,674.71
	Total				₹ 401.21
	Add 15% for contractor's profit and overheads				₹ 3,075.92
	Cost for 2.20sqm.				₹ 1,398.15
	Cost per sqm.				₹ 1,398.20
	Say				

8.13	Providing and fixing factory made Pre-laminated particle board flat pressed three layer or graded wood particle board with one side decorative finish and other side balancing lamination conforming to IS: 12823 Grade I Type II, of approved design, and edges sealed with water resistant paint and lipped with aluminium 'U' type edge beading all-round the shutter, including fixing with angle cleat, grip strip, cadmium plated steel screws including fixing of aluminium hinges 100x63x4 mm etc. complete as per architectural drawing and direction of Engineer-in-Charge (Cost of 'U' beading and hinges will be paid for separately).				
8.128.1	25 mm thick.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 2.10 sqm. (Door size 2.1×1.00 = 2.10 sqm.)				
	Materials				
	Prelaminated particle board = 2.10sqm. +				
	Add for wastage @ 5% = 0.11 sqm.				
	= 2.21sqm.				
08211	Prelaminated particle board	sqm	2.21	₹ 880.00	₹ 1,944.80
08209	Aluminium single cleat of size 30×32×3	each	4.00	₹ 20.00	₹ 80.00
08210	Aluminium grip strip of size 50×12×2	each	8.00	₹ 15.00	₹ 120.00
08137	Edge sealing water resistant paint	litre	0.15	₹ 180.00	₹ 27.00
	Labour				
0210	Carpenter 2nd class	Day	0.27	₹ 380.00	₹ 102.60
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 2,364.40
	Add 1 % for water charges				₹ 23.64
	TOTAL				₹ 2,388.04
	Add 3% for sundries & contingencies				₹ 71.64
	Total				₹ 2,459.68
	Add 15% for contractor's profit and overheads				₹ 368.95
	Cost for 2.10 sqm.				₹ 2,828.63
	Cost per sqm.				₹ 1,346.97
	Say				₹ 1,347.00
8.13	Providing and fixing aluminum U beading of required size to prelaminated /flush door shutter including fixing etc. complete as per direction of Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 1 kg.				
	Material				
	Aluminum U beading = 1.00 kg + Add 10% wastage = 0.10 Kg				
	= 1.10 kg.				
08212	Aluminium 'U' Beading	kilogram	1.10	₹ 250.00	₹ 275.00
	TOTAL				₹ 275.00
	Add 35 % for Anodized 15 micron and labour				₹ 96.00
	TOTAL				₹ 371.00
	Add 1 % for water charges				₹ 2.75
	TOTAL				₹ 373.75
	Add 3% for sundries & contingencies				₹ 11.21

	Total				₹	384.96
	Add 15% for contractor's profit and overheads				₹	57.74
	Cost per kg.				₹	442.70
	Say				₹	442.70
8.13	Providing and fixing, in position concealed G.I. section for wall paneling using board of required thickness fixed on the 'W' profile (0.55mm thick) having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55 mm placed @ 610mm C/C in perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610mm C/C with fully threaded self-tapping drywall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200mm C/C., all complete as per the drawing & directions of engineer-in-charge the joints of the boards are finished with specially formulated jointing compound and 48mm wide jointing tape to provide seamless finish.					
8.130.1	Tapered edge calcium silicate board made with calcareous & siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with compressive strength 225 kg/sq.cm, Bending strength 100 Kg/Sq.cm.					
8.130.1.1	10mm thick.					
Code	Description	Unit	Quantity	Rate	Rate	
	Details of cost for 3.66 m × 3.05 m =11.16 sqm.					
	MATERIALS					
	Calcium silicate board 10mm thick = 11.16 sqm					
	Add wastage @ 10% = 1.12 sqm.					
	Total = 12.28 sqm					
08256	10 mm thick calcium silicate board.	sqm	12.28	₹ 430.00	₹	5,280.40
08270	Ceiling sections.	metre	19.66	₹ 60.00	₹	1,179.60
08271	Perimeter channel	metre	9.60	₹ 35.00	₹	336.00
08272	Nylon sleeves & wooden screws (40mm)	each	42.00	₹ 5.00	₹	210.00
08273	Counter sunk ribbed head screw 25mm.	cent	1.76	₹ 85.00	₹	149.60
08168	Joint tape roll	roll	0.19	₹ 145.00	₹	27.55
	LABOUR:-					
0209	Carpenter 1st class	Day	3.80	₹ 425.00	₹	1,615.00
0203	Beldar	Day	4.60	₹ 300.00	₹	1,380.00
	TOTAL				₹	10,178.15
	Add for water charges @ 1%				₹	101.78
	TOTAL				₹	10,279.93
	Add 3% for sundries & contingencies				₹	308.40
	Total				₹	10,588.33
	Add for contractors profit and overheads @ 15%				₹	1,588.25
	Cost for 11.16 sqm				₹	12,176.58
	Cost for 1 sqm				₹	1,091.09
	Say				₹	1,091.10

8.13	Providing and fixing, in position concealed G.I. section for wall paneling using board of required thickness fixed on the 'W' profile (0.55mm thick) having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55 mm placed @ 610mm C/C in perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610mm C/C with fully threaded self-tapping drywall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200mm C/C., all complete as per the drawing & directions of engineer-in-charge the joints of the boards are finished with specially formulated jointing compound and 48mm wide jointing tape to provide seamless finish.				
8.130.2	Non -asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (high pressure steam cured) as per IS 14862 non combustible, non ignitable, fire propagation index and surface spread of flame (as per BS 476 part IV,V,VI and VII) moisture, termite & fungus resistant with suitable fibre cement screw.				
8.130.2.1	8 mm thick.				
Code	Description	Unit	Quantity	Rate	Rate
	Details of cost for 3.66 m × 3.05 m =11.16 sqm.				
	MATERIALS				
	Multipurpose non asbestos fibre cement board				
	8mm thick = 11.16 sqm				
	Add wastage @ 10% = 1.12 sqm.				
	Total = 12.28 sqm				
08001	8 mm thick multipurpose non asbestos fibre cement board.	sqm	12.28	₹ 313.00	₹ 3,843.64
08270	Ceiling sections.	metre	19.66	₹ 60.00	₹ 1,179.60
08271	Perimeter channel	metre	9.60	₹ 35.00	₹ 336.00
08272	Nylon sleeves & wooden screws (40mm)	each	42.00	₹ 5.00	₹ 210.00
08273	Counter sunk ribbed head screw 25mm.	cent	1.76	₹ 85.00	₹ 149.60
08168	Joint tape roll	roll	0.19	₹ 145.00	₹ 27.55
	LABOUR:-				
0209	Carpenter 1st class	Day	3.80	₹ 425.00	₹ 1,615.00
0203	Beldar	Day	4.60	₹ 300.00	₹ 1,380.00
	TOTAL				₹ 8,741.39
	Add for water charges @ 1 %				₹ 87.41
	TOTAL				₹ 8,828.80
	Add 3% for sundries & contingencies				₹ 264.86
	Total				₹ 9,093.66
	Add for contractors profit and overheads @ 15%				₹ 1,364.05
	Cost for 11.16 sqm				₹ 10,457.71
	Cost for 1 sqm				₹ 937.07
	Say				₹ 937.10

8.13	Providing and fixing, in position concealed G.I. section for wall paneling using board of required thickness fixed on the 'W' profile (0.55mm thick) having a knurled web of 51.55mm and two flanges of 26 mm each with lips of 10.55 mm placed @ 610mm C/C in perimeter channel having one flange of 20 mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610mm C/C with fully threaded self-tapping drywall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200mm C/C., all complete as per the drawing & directions of engineer-in-charge the joints of the boards are finished with specially formulated jointing compound and 48mm wide jointing tape to provide seamless finish.				
8.130.3	Gypsum board conforming to IS: 2095-1996: Part - I				
8.130.3.1	12.5 mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3.66 m × 3.05 m =11.16 sqm.				
	MATERIALS				
	Glass fibre reinforced gypsum board 12.5 mm thick = 11.16 sqm				
	Add wastage @ 10% = 1.12 sqm.				
	Total = 12.28 sqm				
08269	12.5 mm thick Glass fibre reinforced Gypsum board.	sqm	12.28	₹ 215.00	₹ 2,640.20
08270	Ceiling sections.	metre	19.66	₹ 60.00	₹ 1,179.60
08271	Perimeter channel	metre	9.60	₹ 35.00	₹ 336.00
08272	Nylon sleeves & wooden screws (40mm)	each	42.00	₹ 5.00	₹ 210.00
08273	Counter sunk ribbed head screw 25mm.	cent	1.76	₹ 85.00	₹ 149.60
08168	Joint tape roll	roll	0.19	₹ 145.00	₹ 27.55
	LABOUR:-				
0209	Carpenter 1st class	Day	3.80	₹ 425.00	₹ 1,615.00
0203	Beldar	Day	4.60	₹ 300.00	₹ 1,380.00
	TOTAL				₹ 7,537.95
	Add for water charges @ 1%				₹ 75.38
	TOTAL				₹ 7,613.33
	Add 3% for sundries & contingencies				₹ 228.40
	Total				₹ 7,841.73
	Add for contractors profit and overheads @ 15%				₹ 1,176.26
	Cost for 11.16 sqm				₹ 9,017.99
	Cost for I sqm				₹ 808.06
	Say				₹ 808.10
8.13	Providing and fixing Pre -laminated medium density fibre board exterior grade (Grade-I) IS:14587:1998 marked, to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately).				
8.131.1	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick conforming to IS:14587				
Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 7.00 sqm Detail of cost for 350x200 cm = 7sqm MATERIAL 12 mm thick both side laminated board = 7.00 sqm ,Add for wastage @5% = 0.35 sqm ,Total= 7.35 sqm				
	Materials				
08302	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	Sqm	7.35	₹ 460.00	₹ 3,381.00
08103	Screws 25 mm long	100 Nos	100.00	₹ 56.00	₹ 56.00
	Labour				
0210	Carpenter 2nd class	Day	0.90	₹ 380.00	₹ 342.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 4,079.00
	Add 1 % for water charges				₹ 40.79
	TOTAL				₹ 4,119.79
	Add 3% for sundries & contingencies				₹ 123.59
	Total				₹ 4,243.38
	Add 15% for contractor's profit and overheads				₹ 636.51
	Cost for 7.00sqm.				₹ 4,879.89
	Cost per sqm.				₹ 697.13
	Say				₹ 697.10
8.131.2	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 7.00 sqm Detail of cost for 350x200 cm = 7sqm MATERIAL 12 mm thick both side laminated board = 7.00 sqm ,Add for wastage @5% = 0.35 sqm ,Total= 7.35 sqm				
	Materials				
08303	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	Sqm	7.35	₹ 597.00	₹ 4,387.95
08103	Screws 25 mm long	100 Nos	100.00	₹ 140.00	₹ 140.00
	Labour				
0210	Carpenter 2nd class	Day	0.90	₹ 380.00	₹ 342.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 5,169.95
	Add 1 % for water charges				₹ 51.70
	TOTAL				₹ 5,221.65
	Add 3% for sundries & contingencies				₹ 156.65
	Total				₹ 5,378.30
	Add 15% for contractor's profit and overheads				₹ 806.75
	Cost for 7.00sqm.				₹ 6,185.05

	Cost per sqm.				₹ 883.58
	Say				₹ 883.60
8.13	Providing and fixing Pre-laminated medium density fibre board conforming to IS: 14587:1998 marked, with one side decorative lamination and other side balancing lamination Grade-I(exterior grade), in shelves with screws and fittings wherever required, edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand (fittings to be paid separately).				
8.132.1	18 mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.60 sqm. Detail of cost for 4 Nos. 75x20 cm shelves = 0.60 sqm MATERIAL 18 mm Thick MDF Board out side laminated = 0.60 sqm Add wastage @ 5% = 0.03 sqm Total= 0.63 sqm				
	Materials				
2488.00	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	Sqm	0.63	₹ 580.00	₹ 365.40
08307	PVC edge bending tape 2.00 mm thick	m	3.00	₹ 30.00	₹ 90.00
08103	Screws 25 mm long	100 Nos	25.00	₹ 140.00	₹ 35.00
	Labour				
0210	Carpenter 2nd class	Day	0.11	₹ 380.00	₹ 41.80
0203	Beldar	Day	0.06	₹ 300.00	₹ 18.00
	TOTAL				₹ 550.20
	Add 1 % for water charges				₹ 5.50
	TOTAL				₹ 555.70
	Add 3% for sundries & contingencies				₹ 16.67
	Total				₹ 572.37
	Add 15% for contractor's profit and overheads				₹ 85.86
	Cost for 0.60sqm.				₹ 658.23
	Cost per sqm.				₹ 1,097.05
	Say				₹ 1,097.10
8.132.2	25 mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.60 sqm. Detail of cost for 4 Nos. 75x20 cm shelves = 0.60 sqm MATERIAL 25 mm Thick MDF Board outside laminated = 0.60 sqm Add wastage @ 5% = 0.03 sqm Total= 0.63 sqm				
	Materials				
08304	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 25 mm thick confirming to IS:14587	Sqm	0.63	₹ 900.00	₹ 567.00

08307	PVC edge bending tape 2.00 mm thick	m	3.00	₹ 30.00	₹ 90.00
08103	Screws 25 mm long	100 Nos	25.00	₹ 140.00	₹ 35.00
	Labour				
0210	Carpenter 2nd class	Day	0.11	₹ 380.00	₹ 41.80
0203	Beldar	Day	0.06	₹ 300.00	₹ 18.00
	TOTAL				₹ 751.80
	Add 1 % for water charges				₹ 7.52
	TOTAL				₹ 759.32
	Add 3% for sundries & contingencies				₹ 22.78
	Total				₹ 782.10
	Add 15% for contractor's profit and overheads				₹ 117.32
	Cost for 0.60sqm.				₹ 899.42
	Cost per sqm.				₹ 1,499.03
	Say				₹ 1,499.00
8.13	Providing and fixing in wall lining medium density fibre board IS: 14587:1998 marked, Pre-laminated with one side decorative lamination and other side balancing lamination, with necessary fixing arrangement and screws etc. all complete.				
1.133.1	12 mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 sqm MATERIAL 12 mm thick MDF Board Grade-I ,one side laminated = 10.00 sqm Add wastage @10 % = 1.00 sqm Total= 11.00 sqm				
	Materials				
08305	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	Sqm	11.00	₹ 450.00	₹ 4,950.00
08103	Screws 25 mm long	100 Nos	50.00	₹ 140.00	₹ 70.00
05050	Rawl plug 50 mm (designation 10 no)	each	55.00	₹ 7.00	₹ 385.00
	Labour				
0210	Carpenter 2nd class	Day	1.28	₹ 380.00	₹ 486.40
0203	Beldar	Day	1.43	₹ 300.00	₹ 429.00
	TOTAL				₹ 6,320.40
	Add 1 % for water charges				₹ 63.20
	TOTAL				₹ 6,383.60
	Add 3% for sundries & contingencies				₹ 191.51
	Total				₹ 6,575.11
	Add 15% for contractor's profit and overheads				₹ 986.27
	Cost for 10.0sqm.				₹ 7,561.38
	Cost per sqm.				₹ 756.14
	Say				₹ 756.10
8.13	Providing and fixing in wall lining medium density fibre board IS: 14587:1998 marked, Pre-				
1.133.2	18 mm thick.				
Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 10.00 sqm MATERIAL 12 mm thick MDF Board Grade-I ,one side laminated = 10.00 sqm Add wastage @10 % = 1.00 sqm Total= 11.00 sqm				
	Materials				
08306	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 18 mm thick confirming to IS:14587	Sqm	11.00	₹ 580.00	₹ 6,380.00
08103	Screws 25 mm long	100 Nos	50.00	₹ 140.00	₹ 70.00
05050	Rawl plug 50 mm (designation 10 no)	each	55.00	₹ 7.00	₹ 385.00
	Labour				
0210	Carpenter 2nd class	Day	1.28	₹ 380.00	₹ 486.40
0203	Beldar	Day	1.43	₹ 300.00	₹ 429.00
	TOTAL				₹ 7,750.40
	Add 1 % for water charges				₹ 77.50
	TOTAL				₹ 7,827.90
	Add 3% for sundries & contingencies				₹ 234.84
	Total				₹ 8,062.74
	Add 15% for contractor's profit and overheads				₹ 1,209.41
	Cost for 10.0sqm.				₹ 9,272.15
	Cost per sqm.				₹ 927.22
	Say				₹ 927.20
8.13	Providing and fixing in wall lining medium density fibre board IS: 14587:1998 marked, Pre-laminated with one side decorative lamination and other side balancing lamination, with necessary fixing arrangement and screws etc. all complete.				
1.133.3	25 mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 sqm MATERIAL 12 mm thick MDF Board Grade-I ,one side laminated = 10.00 sqm Add wastage @10 % = 1.00 sqm Total= 11.00 sqm				
	Materials				
08304	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 25 mm thick confirming to IS: 14587	Sqm	11.00	₹ 900.00	₹ 9,900.00
08103	Screws 25 mm long	100 Nos	50.00	₹ 140.00	₹ 70.00
05050	Rawl plug 50 mm (designation 10 no)	each	55.00	₹ 7.00	₹ 385.00
	Labour				
0210	Carpenter 2nd class	Day	1.28	₹ 380.00	₹ 486.40
0203	Beldar	Day	1.43	₹ 300.00	₹ 429.00
	TOTAL				₹ 11,270.40
	Add 1 % for water charges				₹ 112.70
	TOTAL				₹ 11,383.10
	Add 3% for sundries & contingencies				₹ 341.49
	Total				₹ 11,724.59

	Add 15% for contractor's profit and overheads				₹ 1,758.69
	Cost for 10.0sqm.				₹ 13,483.28
	Cost per sqm.				₹ 1,348.33
	Say				₹ 1,348.30
8.13	Providing and fixing 25mm thick pre-laminated medium density fibre board exterior grade (Grade-I) IS:14587:1998 marked with one side decorative and other side balancing lamination, for cupboard shutters edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand, including ISI marked nickel plated bright finishing M.S. piano hinges Conforming to IS:3818 with necessary screw etc. all complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2.20 sqm Detail of Cost for 2.20 sqm (2.20 m x 1.00 m)				
	Materials				
08304	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade-I MDF Board 25 mm thick confirming to IS: 14587	Sqm	2.20	₹ 900.00	₹ 1,980.00
08103	Screws 25 mm long	100 Nos	100.00	₹ 140.00	₹ 140.00
08307	PVC edge bending tape 2.00 mm thick	m	3.00	₹ 30.00	₹ 90.00
08310	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	m	4.40	₹ 40.00	₹ 176.00
	Labour				
0210	Carpenter 2nd class	Day	0.55	₹ 380.00	₹ 209.00
0203	Beldar	Day	0.55	₹ 300.00	₹ 165.00
	TOTAL				₹ 2,760.00
	Add 1 % for water charges				₹ 27.60
	TOTAL				₹ 2,787.60
	Add 3% for sundries & contingencies				₹ 83.63
	Total				₹ 2,871.23
	Add 15% for contractor's profit and overheads				₹ 430.68
	Cost for 2.20sqm.				₹ 3,301.91
	Cost per sqm.				₹ 1,500.87
	Say				₹ 1,500.90
8.14	Providing and fixing skirting with Pre-laminated medium density fibre board exterior grade (Grade-I) conforming to IS: 14587:1998 marked, with (one side decorative and other side balancing lamination and edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand with necessary fixing arrangements and screws, including drilling necessary holes for rawl plugs etc. all complete.				
8.135.1	18 mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 6.00 sqm Detail of cost for skirting 200 mm wide & 30 m long Area 0.20 mx30 m = 6.0 sqm Area 0.20 m x30 m = 6.0 sqm Add wastage @ 10 % = 0.60 sqm Total = 6.60 sqm				
	Materials				

08306	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	Sqm	6.60	₹ 580.00	₹ 3,828.00
08103	Screws 25 mm long	100 Nos	100.00	₹ 140.00	₹ 140.00
08307	PVC edge bending tape 2.00 mm thick	m	30.00	₹ 30.00	₹ 900.00
05050	Rawl plug 50 mm (designation 10 no)	each	102.00	₹ 7.00	₹ 714.00
	Labour				
0210	Carpenter 2nd class	Day	0.77	₹ 380.00	₹ 292.60
0203	Beldar	Day	0.86	₹ 300.00	₹ 258.00
	TOTAL				₹ 6,132.60
	Add 1 % for water charges				₹ 61.33
	TOTAL				₹ 6,193.93
	Add 3% for sundries & contingencies				₹ 185.82
	Total				₹ 6,379.75
	Add 15% for contractor's profit and overheads				₹ 956.96
	Cost for 6.0sqm.				₹ 7,336.71
	Cost per sqm.				₹ 1,222.79
	Say				₹ 1,222.80
8.14	Providing and fixing skirting with Pre-laminated medium density fibre board exterior grade (Grade-I) conforming to IS: 14587:1998 marked, with (one side decorative and other side balancing lamination and edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand with necessary fixing arrangements and screws, including drilling necessary holes for rawl plugs etc. all complete.				
8.135.2	25 mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 6.00 sqm Detail of cost for skirting 200 mm wide & 30 m long Area 0.20 mx30 m = 6.0 sqm Area 0.20 m x30 m = 6.0 sqm Add wastage @ 10 % = 0.60 sqm Total = 6.60 sqm				
	Materials				
08304	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 25 mm thick confirming to IS:14587	Sqm	6.60	₹ 900.00	₹ 5,940.00
05050	Screws 25 mm long	100 Nos	100.00	₹ 140.00	₹ 140.00
08307	PVC edge bending tape 2.00 mm thick	m	30.00	₹ 30.00	₹ 900.00
05050	Rawl plug 50 mm (designation 10 no)	each	102.00	₹ 7.00	₹ 714.00
	Labour				
0210	Carpenter 2nd class	Day	0.77	₹ 380.00	₹ 292.60
0203	Beldar	Day	0.86	₹ 300.00	₹ 258.00

	TOTAL				₹	8,244.60
	Add 1 % for water charges				₹	82.45
	TOTAL				₹	8,327.05
	Add 3% for sundries & contingencies				₹	249.81
	Total				₹	8,576.86
	Add 15% for contractor's profit and overheads				₹	1,286.53
	Cost for 6.0sqm.				₹	9,863.39
	Cost per sqm.				₹	1,643.90
	Say				₹	1,643.90
8.14	Providing and fixing in position Phenol bonded Bamboowood panelled or panelled and glazed shutter for door ,windows clerestory windows with pre -molded 30 mm thick planks in approved colours texture & finish .It shall have 10 mm wide 25 mm deep grove to fit in panels the bamboo wood shall have minimum density of 1000 Kg /cum minimum hardness 1000 Kgf .All styles and rails shall have profiled interlocking system locked in place by bamboo pins all complete as per direction of Engineer in charge (the panelling will be paid for separately)					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 2.16 sqm (2.00 m x 1.08 m)					
	Materials					
08291	Bamboo wood shutter for doors	cum	0.0483	₹ 180,000.00	₹	8,694.00
08240	Stainless steel screws 40 mm	100 Nos	32.00	₹ 215.00	₹	68.80
08243	Stainless steel butt hinges 125x64x1.9 mm IS : 12817 marked	10 nos	0.40	₹ 360.00	₹	144.00
0208	Carpenter 2nd class	Day	0.33	₹ 380.00	₹	125.40
0203	Beldar	Day	0.33	₹ 300.00	₹	99.00
	TOTAL				₹	9,131.20
	Add 1 % for water charges				₹	91.31
	TOTAL				₹	9,222.51
	Add 15% for contractor's profit and overheads				₹	1,383.38
	Cost for 2.16sqm.				₹	10,605.89
	Cost per sqm.				₹	4,910.13
	Say				₹	4,910.10
137.00	Providing and fixing in position Phenol bonded Bamboowood panelling of 10 mm thick in 25 to 40 mm thick panelled or panelled and glazed shutter for door ,windows clerestory windows in approved colours texture and finish . The bamboo wood planks shall have minimum density of 1000 Kg /cum minimum hardness 1000 Kgf . The panels shall have profiled interlocking system locked in place with bamboo pins all complete as per direction of Engineer in charge (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured)					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for shutter of a door with 2/3 rd panelling 200 x108 = 2.16 sqm Panel Area =4x45.1 x36.55 cm = 0.66 Sqm					
	Materials					
08292	Bamboo wood Panelling (10 mm thick) 4x47.2x38.65 x 1 cm =.0073 cum +.0007 cum (add 10% wastage) Total =.008 cum	cum	0.0080	₹ 180,000.00	₹	1,440.00
0208	Carpenter 2nd class	Day	0.57	₹ 380.00	₹	216.60
	TOTAL				₹	1,656.60

	Add 1 % for water charges				₹ 16.57
	TOTAL				₹ 1,673.17
	Add 15% for contractor's profit and overheads				₹ 250.98
	Cost for .66 sqm.				₹ 1,924.15
	Cost per sqm.				₹ 2,915.38
	Say				₹ 2,915.40
138.00	Providing and fixing in position 65 mm thick factory made door frame of phenol bonded Bamboowood (superior class interior use) in approved colours ,texture & finish .The bamboo wood shall have minimum density of 1000 Kg /cum , minimum hardness 1000 Kgf .The door frame shall have tenon & mortise interlocking system ,to be fixed to the wall with 100 mm size GI Screws all a complete as per direction of Engineer in charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for .033 cum				
	Materials				
08292	Superior class Bamboo wood door frame 65 mm thick 2x206.75 x9.5 x 6.5 cm = 0.255 cum + 1 x 117.5 x 9.5 6.5 cm = 0.0072 cum Total =0.033 cum + 0.001 cum (add for wastge @ 5%) Grand total = .034 cum	cum	0.0340	₹ 180,000.00	₹ 6,120.00
0208	Carpenter 2nd class	Day	0.72	₹ 380.00	₹ 273.60
	TOTAL				₹ 6,393.60
	Add 1 % for water charges				₹ 63.94
	TOTAL				₹ 6,457.54
	Add 15% for contractor's profit and overheads				₹ 968.63
	Cost for .033 cum				₹ 7,426.17
	Cost per cum				₹ 225,035.45
	Say				₹ 225,035.50
139.00	Providing and fixing in position wall panelling at all heights with integral densified calcium silicate panels/tiles of size 595 x 595mm, having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASTM 518:1991, comprising of a frame made from especially fabricated galvanised mild steel sheet 0.50 mm thick pressed section (galvanizing @120 grams per sqm including both sides) i.e.vertical studs of size 48 x 34 x 36 mm are placed at 600mm center to center in a floor and ceiling channel section of size 50 x 32mm fixed to the floor and soffit at 600mm centers using 12mm dia,50mm long wedge type expanded zinc alloy dash fastner with 10mm bolt. This same channel is then to be fixed in horizontal direction at 600mm center to center so as to form a grid of 600mm x 600mm. Glasswool of 50mm thickness is then to be inserted in the slots and finally calcium silicate non combustible panels/tiles are to be screw fixed with self tapping pan head nickel coated mild steel screws of size 13 x 3.2mm on to this grid leaving an even groove of 1 mm between the panels. The joints between the panels are to be duly jointed and finished using recommended jointing calcium silicate based primer compound and fiber joint tape roll 50mm wide (90 metre)roll and two coats of primer suitable for panelling as per manufacturer's specification as per direction of Engineer-in-Charge all complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Materials				
	Details of cost for 6.00 x 3.65=21.90 sqm MATERIAL				

08293	15 mm thick, light weight,fully perforated square/butt edge integral densified,false ceiling tiles of size 595x595 mm.				
	21.90 sqm + 1.10 sqm (Add 5% wastage) Total = 23.00 sqm	Sqm	23	₹ 980.00	₹ 22,540.00
08294	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm 2 x 6.00 m=12m +0.60 (Add 5% wastage) = 12.60 m	metre	12.6	₹ 69.00	₹ 869.40
08295	Galvanised M.S. sheet 0.50 mm thick pressed stud : 48x34x36 mm 11 x 3.65 m = 40.15 m + 5 x 6.00 = 30.00 m Total= 70.15 m +3.51 (Add 5% wastage) Total = 73.66m	metre	73.66	₹ 87.00	₹ 6,408.42
08296	Self tapping pan head nickle coated mild steel screws of size 13 x 3.2 mm	1000 Nos	0.392	₹ 645.00	₹ 252.84
08297	12 mm dia 50 mm long wedge type expanded zinc alloy dash fastner	each	19	₹ 10.00	₹ 190.00
08298	Glass wool 50 mm thick 21.90 +1.10 (Add 5% wastage) = 23.00 sqm	Sqm	23	₹ 280.00	₹ 6,440.00
08299	Calcium silicate base compound for jointing calcium silicate tiles 22.81/103.68 x 21.9 = 4.82 kgs	Kg	4.2	₹ 30.00	₹ 126.00
08300	Fibre joint tape 50 mm wide (90 metre) roll 1.27/103.68 x 21.90 = 0.27 roll	each roll	0.27	₹ 200.00	₹ 54.00
0209	Carpenter 1st class 0.30x21.90=6.57 days	Day	6.57	₹ 425.00	₹ 2,792.25
0210	Carpenter 2nd class 0.13x21.90=2.847 days	Day	2.847	₹ 380.00	₹ 1,081.86
0203	Beldar 0.35x21.90=7.665 days	Day	2.847	₹ 300.00	₹ 854.10
0227	Painter	Day	1.095	₹ 340.00	₹ 372.30
	TOTAL				₹ 41,981.17
	Add 1 % for water charges				₹ 419.81
	TOTAL				₹ 42,400.98
	Add 3% for sundries & contingencies				₹ 1,272.03
	Total				₹ 43,673.01
	Add 15% for contractor's profit and overheads				₹ 6,550.95
	Cost for 21.90 Sqm				₹ 50,223.96
	Cost per Sqm				₹ 2,293.33
	Say				₹ 2,293.30

140	Providing and fixing in position wall panelling at all heights with 6 mm thick BWP ply board lapping with 4 mm thick Teak Veneer of approved quality in outer face, decorative teak wood bead (50 x 40) at top and skirting (150 x 25), comprising of a frame made from especially fabricated galvanised mild steel sheet 0.50 mm thick pressed section (galvanizing @120 grams per sqm including both sides) i.e.vertical studs of size 48 x 34 x 36 mm are placed at 600mm center to center in a floor and ceiling channel section of size 50 x 32mm fixed to the floor and soffit at 600mm centers using 12mm dia,50mm long wedge type expanded zinc alloy dash fastner with 10mm bolt. This same channel is then to be fixed in horizontal direction at 600mm center to center so as to form a grid of 600mm x 600mm. Glasswool of 50mm thickness is then to be inserted in the slots and finally ply board are to be screw fixed with self tapping pan head nickel coated mild steel screws of size 13 x 3.2mm all complete as per manufacturer's specification as per direction of Engineer-in-Charge all complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Materials				
	Details of cost for 6.00 x 3.65=21.90 sqm MATERIAL				
	6 mm thick BWP Ply Board				
	21.90 sqm + 1.10 sqm (Add 5% wastage) Total = 23.00 sqm	Sqm	23	₹ 753.00	₹ 17,319.00
	4 mm thick Teak Veneer				
	21.90 sqm + 1.10 sqm (Add 5% wastage) Total = 23.00 sqm	Sqm	23	₹ 1,400.00	₹ 32,200.00
08294	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm 2 x 6.00 m=12m +0.60 (Add 5% wastage) = 12.60 m	metre	12.6	₹ 69.00	₹ 869.40
08295	Galvanised M.S. sheet 0.50 mm thick pressed stud : 48x34x36 mm 11 x 3.65 m = 40.15 m + 5 x 6.00 = 30.00 m Total= 70.15 m +3.51 (Add 5% wastage) Total = 73.66m	metre	73.66	₹ 87.00	₹ 6,408.42
08296	Self tapping pan head nickle coated mild steel screws of size 13 x 3.2 mm	1000 Nos	0.392	₹ 645.00	₹ 252.84
08297	12 mm dia 50 mm long wedge type expanded zinc alloy dash fastner	each	19	₹ 10.00	₹ 190.00
08298	Glass wool 50 mm thick 21.90 +1.10 (Add 5% wastage) = 23.00 sqm	Sqm	23	₹ 280.00	₹ 6,440.00
08299	Calcium silicate base compound for jointing calcium silicate tiles 22.81/103.68 x 21.9 = 4.82 kgs	Kg	4.2	₹ 30.00	₹ 126.00
08300	Fibre joint tape 50 mm wide (90 metre) roll 1.27/103.68 x 21.90 = 0.27 roll	each roll	0.27	₹ 200.00	₹ 54.00
0209	Carpenter 1st class 0.30x21.90=6.57 days	Day	6.57	₹ 425.00	₹ 2,792.25
0210	Carpenter 2nd class 0.13x21.90=2.847 days	Day	2.847	₹ 380.00	₹ 1,081.86
0203	Beldar 0.35x21.90=7.665 days	Day	2.847	₹ 300.00	₹ 854.10
0227	Painter	Day	1.095	₹ 340.00	₹ 372.30
	TOTAL				₹ 68,960.17
	Add 1 % for water charges				₹ 689.60
	TOTAL				₹ 69,649.77

	Add 3% for sundries & contingencies				₹ 2,089.49
	Total				₹ 71,739.26
	Add 15% for contractor's profit and overheads				₹ 10,760.89
	Cost for 21.90 Sqm				₹ 82,500.15
	Cost per Sqm				₹ 3,767.13
	Say				₹ 3,767.10
141	Providing and Fixing Channeled Hi Density Fiber Board Wall Panel (woodworks) (WC01C28LUMW) perforated panels of width 128mm, thickness of 15mm and length 2440mm with minimum 830 kg/M3 density substrate with a laminated facing as per the approved shade/species & finish and a melamine balancing layer on the reverse side. The boards shall have a special perforation pattern where the visible surface has a "Helmholtz" fluted perforation of 4mm width and 28 mm visible panel each. The panels shall provide a fire reaction of Class of 1 as per Part 7 of BS 476. The edges of the panels shall be "tongue-and-grooved" to receive special clips for installation. The back of the perforated panel shall have sound absorbing non-woven acoustical fleece having NRC of 0.55. The panels shall be mounted on special aluminium splines using clips. Install wooden battens of section 50 mm x 50 mm or approved by the Architect on the solid wall horizontally using screws and plugs at spacing of 600 mm centre-to-centre. Screw the aluminium-extruded keel for channeled wood works (GTPT001) over the lowest and second wooden batten at an on-centre distance of 600 mm. Install the first set of wooden panels by inserting the clips for border channeled woodworks (GTPT002) and insert the groove of the panel into the projecting flange of the aluminium clip. Continue installing rows of panels by inserting the tongue into the groove of the earlier inserted panel and progressively installing clips for inside channeled woodworks (GTPT003) into the next keel till the actual height is achieved. Use clips for borer channeled woodworks (GTPT002) to finish off the installation. Finish off the edges using wooden moulding of matching colour approved by the Architect, suitably fixed all complete as per drawings and specification and direction of the Engineer-in-Charge.				

S U B - H E A D - 9



S T E E L W O R K

SUB HEAD : 9.0 / STEEL WORK
BASIC RATES

Code No.	Description	Unit	Rate
0201	Bandhani	Day	₹ 300.00
0206	Blacksmith 1st class	Day	₹ 425.00
0207	Blacksmith 2nd class	Day	₹ 380.00
0203	Beldar	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0204	Belder skilled	Day	₹ 340.00
0217	Glazier	Day	₹ 380.00
08061	Bright finished or black enameled mild steel butt hinges 100x58x1.90 mm	10 Nos	₹ 100.00
09014	Pulley 25 mm dia	Each	₹ 55.00
09016	Rolling shutter made of 80x1.25 mm machine rolled laths	Sqm	₹ 1,340.00
09019	Top cover for rolling shutters 1.25 mm thick	Metre	₹ 900.00
09002	275 mm long wire spring grade no 2 for rolling shutters	Each	₹ 365.00
09003	Ball bearing for rolling shutters	Each	₹ 300.00
09006	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 10.00 sq.m and up to 16.80 sq.m area of door	Sqm	₹ 630.00
09007	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 16.80 sq.m area of door	Sqm	₹ 630.00
05038	Mild steel round bar 12 mm dia and below	Quintal	₹ 4,055.00
05039	Mild steel round bar above 12 mm dia	Quintal	₹ 4,010.00
05056	Structural steel such as tees, angles channels and R.S. joists	Quintal	₹ 4,267.00
05026	Flats up to 10 mm in thickness	Quintal	₹ 3,992.00
05025	Flats exceeding 10 mm in thickness	Quintal	₹ 3,967.00
05036	Mild steel plates	Quintal	₹ 5,141.00
05041	Mild steel sheets for tanks	Quintal	₹ 4,532.00
05035	Mild steel hooks	Each	₹ 33.00
05037	Mild steel rivets	Quintal	₹ 5,292.00
05017	Bolts and nuts up to 300 mm in length	Quintal	₹ 5,200.00
05016	Bolts and nuts above 300 mm in length	Quintal	₹ 5,350.00

Code No.	Description	Unit	Rate
09009	Iron pintels including welded pin	Each	₹ 45.00
09023	Welding by gas plant in/c wages for welder	Cm	₹ 2.00
09022	Welding by electric plant in/c wages for welder	Cm	₹ 2.00
09001	20 mm dia holding down bolts	Quintal	₹ 5,650.00
09010	Mild steel sheets with bolts and nuts to rest on pintels	Each	₹ 135.00
19032	G.I. pipes 40 mm dia	Metre	₹ 240.00
09013	Mild steel tubes hot finished welded type	Kilogram	₹ 56.00
09012	Mild steel tubes hot finished seamless type	Kilogram	₹ 60.00
09011	Mild steel tubes electric resistant or induction butt welded	Kilogram	₹ 65.00
09005	Circular C.I. Box for ceiling fan	Each	₹ 60.00
09015	Pulley 40 mm dia	Each	₹ 65.00
09018	Rolling shutters made of 80x0.90 mm machine rolled laths	Sqm	₹ 1,100.00
09017	Rolling shutters made of 80x1.2 mm machine rolled laths	Sqm	₹ 1,200.00
09020	Top cover of Rolling shutters 0.90 mm thick	Metre	₹ 330.00
09021	Top cover of Rolling shutters 1.20 mm thick	Metre	₹ 350.00
09008	Extra for providing grilled rolling shutters with 8 mm dia M.S. rod instead of laths	Sqm	₹ 290.00
09024	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 60mm	10 Nos.	₹ 286.00
09025	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 80mm	10 Nos.	₹ 330.00
09026	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 120mm	10 Nos.	₹ 400.00
09027	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 140mm	10 Nos.	₹ 505.00

Code No.	Description	Unit	Rate
09028	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 160mm	Sqm	₹ 630.00
09029	Stainless steel (Grade-304) hollow section round/square tubes	kg	₹ 250.00
09030	Stainless steel bolts/square bar and plates	kg	₹ 130.00
09031	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia. of wire 0.63 mm	sqm	₹ 286.00
09032	Stainless steel wire guage (Grade-304) aperture 1.4mm and 0.50 mm dia wire	sqm	₹ 715.00
08146	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	₹ 360.00
08147	Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm	sqm	₹ 535.00
09033	Steel beading size 10 x 10 x 1.6 mm (box type)	metre	₹ 31.00
09034	Structural hollow steel section conforming to IS: 4923, Grade: Yst 310 or Circular Section conforming to IS: 1161, Grade: Yst 310	kg	₹ 62.00
09035	Structural steel section confirming to IS 2062 - 1999 grade B Fe 410, normalized control cooled , yield strength + 250 MPa as per latest IS Code	kg	₹ 49.00
09036	High strength friction grip bolts (HSFG bolts) of class / grade EN 8	kg	₹ 155.00
0468	Carriage: Steel	Tonne	₹ 110.94
0427	Carriage: G.I. pipes below 100 mm dia	Tonne	₹ 110.94

SUB HEAD : 9.0
STEEL WORK

Note:

- 1 A priming coat of approved steel primer such as Red Oxide/Zinc Chromate primer conforming to IS 2074 shall be applied before any member of steel structure are placed in position or taken out of workshop. The portion to be embedded in concrete shall not be applied any priming coat, if not otherwise stated.
- 2 T- iron door windows and ventilator frames shall be measured in running metre, along the centre line of the frame correct to a 1mm and weight calculated on the basis of standard tables. No deduction or extra payment shall be made for making holes and making arrangement for fixing fittings including packing wherever necessary.

9.1 Providing structural steel work in single section fixed with or without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as required.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one quintal	Kg.			
	Steel = 1.00 Qtl., Add wastage @ 5% = 0.05 Qtl. Total = 1.05 Qtl.				
1007-08	Steel (RS joist, flats, tees-channel-angle etc)	Qtl.	1.05	₹ 4,129.50	₹ 4,335.98
	Priming cost-(Rate vide item no. 12.33.3 finishing) : "A"	Sqm.	3.00	₹ 26.80	₹ 80.40
	b. Carriage:				
0468	Steel	Tonne	1.05	₹ 110.94	₹ 116.49
	c. Labours:				
0215	Fitter (Grade I)	Day	0.500	₹ 380.00	₹ 190.00
0207	Blacksmith 2nd class	Day	0.750	₹ 380.00	₹ 285.00
0203	Beldar	Day	1.000	₹ 300.00	₹ 300.00
	d. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 5,227.47	₹ 78.41
	e. Sundries (scaffolding etc.) & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 5,305.88	₹ 159.18
	f. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 5,465.06	₹ 819.76
				Total	₹ 6,365.22
		Total cost for 1 Kg.			₹ 63.65
				Say,	₹ 63.70

9.2 Providing structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as required.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a truss 7.6m clear span	Kg.			
	a. Materials:				
05056	(i) (a) Principal rafter (T-iron) 100x 100x 10mm @ 15kg/m = 142.50Kg (b) Struts (angles) 40x40x6mm 2x1.35 = 2.70m @ 3.5kg/m = 9.45kg, (a+b) = 151.95kg+ [Add wastage @ 5% = 7.60kg] = Total 159.55kg. = Say, 1.60Qtl.	Qtl.	1.600	₹ 4,267.00	₹ 6,827.20
1008	(ii) (a) Ties (flats) 50x12mm 2x2.7 = 5.4m @ 4.7kg/m = 25.38kg (b) Ties central (flats) 50x10mm 1x2.80 = 2.8m @ 3.90kg/m = 10.92kg. (c) Braces (flats) 50 x 10mm 2x1.84 = 3.68m @ 3.90kg/m = 14.35kg , (a+b+c) = 50.65 kg+ [Add wastage @ 5% = 2.39kg.] = Total 50.24kg. = Say, 0.5065 Qtl.	Qtl.	0.5065	₹ 3,992.00	₹ 2,021.95
05036	(iii) (a) Gusset plates 10mm thick 1x0.74x0.35m = 0.259sqm. (b) shoe 4x0.46x0.46 = 0.845sqm., Total (a+b) = 1.104sqm.@ 78.4kg/m = 86.55kg. (c) 12mm plates at the point of principal rafter and strut-2x0.3x0.2 = 0.12sqm.+ Tie beam, brace and strut-2x0.5x0.3 = 0.30sqm.+ Sole plates-2x0.46x0.46 = 0.42sqm.+ Anchor plate-2x0.46x0.1 =0.09sqm., Total (b) = 0.93 sqm. Say 1.00 sqm. @ 94.4kg/m = 94.40kg. Total (a+b+c) = 180.95kg. + [add wastage @ 5% = 9.05kg.] = 190.00kg or 1.90Qtl.	Qtl.	1.900	₹ 5,141.00	₹ 9,767.90
05037	(iv) 16mm dia. 50mm long rivets = 56 nos.+ [Add wastage @ 5 % = 2.8 nos.] = 58.8 nos.	Qtl.	0.0684	₹ 5,292.00	₹ 361.97

09001	(v) 20mm dia. holding down bolts 4 Nos.x460mm = 1840mm + [Add wastage @ 5% = 92mm] = 1932 mm	Qtl.	0.0529	₹ 5,650.00	₹ 298.89
	[Cost for riveting & bolting and welding are assumed same (LS)]				
	Applying priming coat- T.Iron 9.5x0.4 = 3.80sqm.+ Struts 2.70x0.16 = 0.43sqm.+ Ties 5.4x0.124 = 0.67sqm.+ Braces 2x 1.84x0.12 = 0.44 sqm.+ Ties 2.8x0.12 = 0.34 sqm. Total = 5.68 sqm.(Rate vide item no. 12.33.3 finishing) : "A"	Sqm.	5.68	₹ 26.80	₹ 152.22
	b. Carriage:				
0468	Structural steel (all)	Tonne	0.4128	₹ 110.94	₹ 45.80
	c. Labours:				
0215	Fitter (Grade I)	Day	2.70	₹ 380.00	₹ 1,026.00
0207	Blacksmith 2nd class	Day	3.60	₹ 380.00	₹ 1,368.00
0204	Beldars skilled	Day	5.40	₹ 340.00	₹ 1,836.00
0203	Beldar	Day	3.60	₹ 300.00	₹ 1,080.00
0201	Bandhani	Day	0.44	₹ 300.00	₹ 132.00
	d. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 24,765.71	₹ 371.49
	e. Sundries (scaffolding etc.) & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 25,137.20	₹ 754.12
	f. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 25,891.32	₹ 3,883.70
	Quantity of net steel (151.95+50.65+180.95+6.5+5.04)=395.09 kg = 3.9509 Qtl.			Total	₹ 29,927.24
		Total cost for 1 Kg.			₹ 75.75
				Say,	₹ 75.80

9.3 Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm at 100 mm centre to centre and braced with flat iron diagonals 20x5mm size with top and bottom rail of T-iron 40x40x6mm with 40mm dia. steel pulleys & with riveted bolts, nuts, locking arrangement, stoppers, handles, hold fast /anchor bolt including embedding in cement concrete of required grade for fixing in position, all necessary fittings, including applying a priming coat of approved steel primer etc. complete as required.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a gate 2.4mx1.5m = 3.6sqm.	Sqm.			
	a. Materials:				
05056	(i) Channels: 20x10x2mm section 2x18x2.4 = 86.40m+ [Add wastage @ 10% = 8.64m] = 95.04m @ 0.56kg/m = 53.22Kg.	Qtl.	0.530	₹ 4,267.00	₹ 2,261.51
05056	(ii) M.S. Tee: 40x40x6mm section for bottom & top = 2 x 1.65m =3.30m @ 3.5kg/m = 11.55kg+ [Add wastage @ 10% = 1.15 Kg.] = 12.70Kg. Say, 0.127 Qtl.	Qtl.	0.127	₹ 4,267.00	₹ 541.91
1008	(iii) Flat iron diagonals: 20mm x 5mm flat iron diagonals 68.275m @ 0.8kg/m = 54.62kg+ [Add wastage @ 10% = 5.46kg] = 60.08kg = Say,0.60 Qtl.	Qtl.	0.600	₹ 3,992.00	₹ 2,395.20
05037	Rivets 6mm dia. [40 nos i/c wastage]	Qtl.	0.005	₹ 5,292.00	₹ 26.46
1008	Hold fast & stopper (20 x 5 mm flat, 450mm long each, total 9 nos.)	Qtl.	0.022	₹ 3,992.00	₹ 87.82
05039	MS rod 16mm dia. for handles (450mm long each, 2 nos.).	Qtl.	0.015	₹ 4,010.00	₹ 60.15
05017	Anchor bolts 12mm dia. (75mm long each, 10 nos.).	Qtl.	0.015	₹ 5,200.00	₹ 78.00
	Cost of locking arrangements (LS)	L.S.	60.15	₹ 2.00	₹ 120.30
09015	Pulleys 40mm dia.	Each	10	₹ 65.00	₹ 650.00
	Priming coat: Channel - 36x0.076x2.4 = 6.57sqm.+ Tee- 0.16x3.3=0.53sqm.+Flats -0.05x68 = 3.40sqm.= Total 10.50sqm. (Rate as per item No. 12.31.3) ("A")	Sqm	10.50	₹ 26.80	₹ 281.40
	b. Carriage:				
0468	Structural steel (all)	Tonne	0.1314	₹ 110.94	₹ 14.58
	c. Labours:				
0215	Fitter (Grade I)	Day	3.00	₹ 380.00	₹ 1,140.00
0206	Blacksmith 1st class	Day	6.00	₹ 425.00	₹ 2,550.00
0207	Blacksmith 2nd class	Day	6.00	₹ 380.00	₹ 2,280.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50

0220	Mason 2nd class	Day	0.50	₹ 380.00	₹ 190.00
0203	Beldar	Day	8.00	₹ 300.00	₹ 2,400.00
	d. Extra charges for CC/CM for repairs after fixing hold fast, scaffolding, transport to site etc. : @ 2.50% on total ex/c "A".	5%	on	₹ 15,008.43	₹ 750.42
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 15,758.85	₹ 236.38
	f. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 15,995.23	₹ 479.86
	g. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 16,475.09	₹ 2,471.26
				Total	₹ 19,227.75
			Total cost for 1 Sqm.		₹ 5,341.04
					₹ 5,341.00

9.4 Providing and fixing in position 1mm thick M.S. sheet sliding-shutters with frame and diagonal braces of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junction and corners 25mm dia pulley, 40x40x6mm angle and T-iron guide sufficiently long at the top and bottom respectively, channels & with bolts, nuts, rivets, locking arrangement, stoppers, handles, hold fast including embedding in cement concrete of required grade for fixing in position, all necessary fittings, including applying a priming coat of approved steel primer etc. complete as required.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one double leaf door size 2.4x2.4m = 5.76sqm.	Sqm.			
	a. Materials:				
05041	(i) M.S. sheet 1mm thick 5.76sqm. @ 7.85kg/sqm. = 45.216kg.+ [Add wastage @ 10% = 4.522kg]. = 49.738kg = 0.497 Qtl.	Qtl.	0.497	₹ 4,532.00	₹ 2,252.40
05036	(ii) Gusset plates 3.00mm thick: Area of one gusset plate [0.3x0.04 = 0.012]+ [1/2x0.26x0.26 = 0.034]+ [0.26x0.04 = 0.010] = 0.056sqm. Total 8x0.056 = 0.448sqm. & circle (22/7x1/4x0.3x0.3=0.071sqm.) Total 2x0.071 = 0.142sqm. 0.590sqm.@23.55kg/sqm.= 13.89kg.+ (Add wastage @ 10% = 1.39kg) = 15.28kg. or 0.153 qtl.	Qtl.	0.153	₹ 5,141.00	₹ 786.57
05056	(iii) Angle iron 40x40x6mm @ 3.5kg/m: Sides- (4x2.4 = 9.6m)+ T&B (2x2x1.2 = 4.8m.), Diagonals-(2x2.5=5.0m & 2x2.45 = 4.9m)+ Top and bottom guides (2x5.0 = 10.0m) Top guide supports (12x0.3 = 3.6m) Total = 37.9m @3.5kg. per m. = 132.65kg.+ Add wastage@ 10%= 13.26kg. = 145.91kg. or 1.459 Qtl.	Qtl.	1.460	₹ 4,267.00	₹ 6,229.82
05056	(iv) Channel 25x25x6mm @ 3.05kg/m Bottom- 2.4m : 2.4x3.05= 7.32 kgn & Channel 40x40x6mm @ 5.56kg/m: 0.5x5.56 = 2.78Kg. Total '= 10.1kg.+ (Add wastage @ 10% = 1.101 kg.) = 11.11kg. or 0.11q	Qtl.	0.110	₹ 4,267.00	₹ 469.37
09014	(v) 25mm dia. Pulley	Each	8	₹ 55.00	₹ 440.00
	(vi) Handles and locking arrangements	L.S.	180.45	₹ 1.00	₹ 180.45
	(vii) Bolts and rivets	L.S.	275.00	₹ 1.00	₹ 275.00
	(viii) Hold fast & stoper etc.	L.S.	87.82	₹ 1.00	₹ 87.82
	Priming coat: M.S. Sheet 2x5.76 = 11.52+Angle iron 0.16x36 = 5.76+Angle iron 0.16x36 = 5.76+Channel- 0.15x2.4=0.36+0.24x0.5=0.12 '= 17.76 Say 18.0sqm (Rate as per item 13.50.3 of S.H. finishing) "A"	Sqm	20.00	₹ 26.80	₹ 536.00
	CC 1:3:6 to fix pin clamps Rate as per items No. 4.2.5 of SH:4 "A"	Cum.	0.064	₹ 8,219.00	₹ 526.02
	b. Carriage:				
0468	Structural steel (all)	Tonne	0.222	₹ 110.94	₹ 24.63
	c. Labours:				
0215	Fitter (Grade 1)	Day	2.00	₹ 380.00	₹ 760.00
0206	Blacksmith 1st class	Day	3.00	₹ 425.00	₹ 1,275.00
0207	Blacksmith 2nd class	Day	4.00	₹ 380.00	₹ 1,520.00
0203	Beldar	Day	4.00	₹ 300.00	₹ 1,200.00
0219	Mason 1st class	Day	0.06	₹ 425.00	₹ 25.50
0220	Mason 2nd class	Day	0.06	₹ 380.00	₹ 22.80

	d. Extra charges for CM for repairs after fixing hold fast, scaffolding, drilling holes, transport to site etc. : @ 1.50% on total ex/c "A".	1.5%	on	₹ 15,549.36	₹ 233.24
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 15,782.60	₹ 236.74
	f. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 16,019.34	₹ 480.58
	g. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 16,499.92	₹ 2,474.99
					₹ 20,036.93
		Total cost for 1 Sqm.			₹ 3,478.63
				Say,	₹ 3,478.60

9.5 Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, & with cleats with bolts & nuts, rivets, locking arrangement, handles, hooks & eyes, pinlets including embedding in cement concrete of required grade for fixing in position, all necessary fittings, including applying a priming coat of approved steel primer etc. complete as required:-

9.5.1 Using M.S. angels 40x40x6 mm for diagonal braces.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a double leaf door of size 2.4mx2.4m=5.76sqm.	Sqm.			
	a. Materials:				
05041	(i) M.S. sheet 1mm thick 5.76sqm. @ 7.85kg/sqm. = 45.216kg.+ Add wastage @ 10% = 4.522kg. = 49.738kg = 0.497 Qtl.	Qtl.	0.497	₹ 4,532.00	₹ 2,252.40
05036	(ii) Gusset plates 3.00mm thick Area of one gusset plates 0.3x0.04 = 0.0120+ 1/2x0.26(0.04+0.3) = 0.0442 '= 0.0562sqm.+ 8x0.0562 = 0.4496sqm.+ 2x22/7x1/4x0.3x0.3=0.1414sqm.'= 0.5910sqm. 0.5910sqm.@23.55kg/sqm.= 13.92kg.+ Add wastage @ 10% = 1.39kg - 15.31kg. or 0.153 Qtl.	Qtl.	0.153	₹ 5,141.00	₹ 786.57
05056	(iii) Angle iron: 40x40x6mm @3.5kg/m Sides- (4x2.40 = 9.6m) + Top & bottom-(4x1.20=4.8m)+ Diagonal (2x2.45 = 4.9m & 2x2.40 = 4.8m) = 24.30m+(Add wastage @ 10% = 2.43m) = 26.73m @ 3.5kg. per m. = 93.56kg=0.936 Qtl.	Qtl.	0.936	₹ 4,267.00	₹ 3,993.91
09009	Pinlets including welded pin	Each	4	₹ 45.00	₹ 180.00
09010	M.S. cleats with bolts and nuts to rest on pinlets	Each	4	₹ 135.00	₹ 540.00
05035	Hooks & eyes	Each	2	₹ 33.00	₹ 66.00
	Locking arrangements and handles	L.S.	180.45	₹ 1.00	₹ 180.45
	Rivets etc.	L.S.	275.00	₹ 1.00	₹ 275.00
	Priming coat: M.S. sheet = 11.52 Angle iron-0.16x24.3 = 3.89 Rate as per items No. 12.31.3. "A"	Sqm	15.41	₹ 26.80	₹ 412.99
	CC 1:3:6 to fix pin clamps Rate as per items No. 4.2.5 of SH:4 "A"	Cum.	0.064	₹ 3,112.70	₹ 199.21
	b. Carriage:				
0468	Structural steel (all) (0.0497+0.0153+0.0936 tonne)	Tonne	0.1586	₹ 110.94	₹ 17.60
	c. Labours:				
0215	Fitter (Grade I)	Day	2.00	₹ 380.00	₹ 760.00
0206	Blacksmith 1st class	Day	3.00	₹ 425.00	₹ 1,275.00
0207	Blacksmith 2nd class	Day	4.00	₹ 380.00	₹ 1,520.00
0219	Mason 1st Class	Day	0.06	₹ 425.00	₹ 25.50
0220	Mason 2nd class	Day	0.06	₹ 380.00	₹ 22.80
0203	Beldar	Day	5.00	₹ 300.00	₹ 1,500.00
	d. Extra charges for CM for repairs after fixing hold fast, scaffolding, transport to site etc. : @ 1.50% on total ex/c "A".	1.5%	on	₹ 13,395.23	₹ 200.93
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 13,596.16	₹ 203.94
	f. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 13,800.10	₹ 414.00

	g. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 14,214.10	₹ 2,132.12
				Total	₹ 16,958.42
		Total cost for 1 Sqm.			₹ 2,944.17
				Say,	₹ 2,944.20

9.5.2 Using flats 30x6mm for diagonal braces and central cross piece.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a double leaf door of size 2.4mx2.4m=5.76sqm.	Sqm.			
	a. Materials:				
05041	(i) M.S. sheet 1mm thick 5.76sqm. @ 7.85kg/sqm. = 45.216kg.+ Add wastage @ 10% = 4.522kg. = 49.738kg = 0.497 Qtl.	Qtl.	0.497	₹ 4,532.00	₹ 2,252.40
05036	(ii) Gussets plates-3.00mm thick vide (ii) in item 10.4 = 0.5910sqm. at mid height = 4x0.0528 = 0.2112sqm.'= 0.8022sqm.Add wastage @ 10% = 0.0802sqm.'=0.8824sqm. @ 23.55 kg/sqm =20.78 kg '= 0.2078 Qtl	Qtl.	0.208	₹ 5,141.00	₹ 1,068.30
05056	(iii) Angle iron:40x40x6mm @3.5kg/m Sides-4x2.40 = 9.6m Top & bottom-4x1.20=4.8m '= 14.40m Add wastage @ 10% = 1.44m Add wastage @ 10% = 1.44m '= 15.84m 15.84m @ 3.5kg. per m.= 55.44kg =0.554 Qtl	Qtl.	0.554	₹ 4,267.00	₹ 2,363.92
1008	(iv) Flats 30x6mm @1.4kg/m 4x2.45=9.80m+ 2x1.20=2.40m '= 12.20m+ Add wastage @ 10% = 1.22m '= 13.42m 13.42m @ 1.4kg. per m. = 18.788kg. = 0.188 Qtl	Qtl.	0.188	₹ 3,992.00	₹ 750.50
09009	Pintles including welded pin	Each	4	₹ 45.00	₹ 180.00
09010	M.S. cleats with bolts an nuts to rest on pintles	Each	4	₹ 135.00	₹ 540.00
05035	Hooks & eyes	Each	2	₹ 33.00	₹ 66.00
	Locking arrangements and handles	L.S.	180.45	₹ 1.00	₹ 180.45
	Rivets etc.	L.S.	275.00	₹ 1.00	₹ 275.00
	Priming coat: M.S. sheet = 11.52 Angle iron-0.16x24.3 = 3.89 0.16x14.40 = 2.30+ Flats 0.072x12.2 = 0.88 '= 14.70sqm.(A) Rates as per Item No. 12.31.3	Sqm	14.70	₹ 26.80	₹ 393.96
	CC 1:3:6 to fix pin clamps Rate as per items No. 4.2.5 of SH:4 "A"	Cum.	0.064	₹ 3,112.70	₹ 199.21
	b. Carriage:				
0468	Structural steel (all) (0.0497+0.02078+0.0554+0.0188 tonne)	Tonne	0.1259	₹ 110.94	₹ 13.97
	c. Labours:				
0215	Fitter (Grade I)	Day	2.00	₹ 380.00	₹ 760.00
0206	Blacksmith 1st class	Day	3.00	₹ 425.00	₹ 1,275.00
0207	Blacksmith 2nd class	Day	4.00	₹ 380.00	₹ 1,520.00
0219	Mason 1st Class	Day	0.06	₹ 425.00	₹ 25.50
0220	Mason 2nd class	Day	0.06	₹ 380.00	₹ 22.80
0203	Beldar	Day	4.00	₹ 300.00	₹ 1,200.00
	d. Extra charges for CM for repairs after fixing hold fast, scaffolding, transport to site etc. : @ 1.50% on total ex/c "A".	1.5%	on	₹ 12,493.84	₹ 187.41
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 12,681.25	₹ 190.22
	f. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 12,871.47	₹ 386.14
	g. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 13,257.61	₹ 1,988.64
				Total	₹ 15,839.42
		Total cost for 1 Sqm.			₹ 2,749.90
				Say,	₹ 2,749.90

- 9.6 Supplying and fixing rolling shutters of approved make, made of required size M.S. laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 275mm long wire springs grade No.2 and M.S. top cover of required thickness for rolling shutters & with handles, hold fast including embedding in cement concrete of required grade required for fixing in position, all necessary fittings, including applying of approved steel primer etc. complete as required:-

9.6.1 80xl.25mm M.S. laths with 1.25 mm thick top cover.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a shutter of size 3mx2.5m = 7.5sqm.	Sqm.			
	a. Materials:				
09016	Rolling shutter complete	Sqm	7.50	₹ 1,340.00	₹ 10,050.00
09019	Top Cover	Metre	3.00	₹ 900.00	₹ 2,700.00
09002	Coiled type spring	Each	1.00	₹ 365.00	₹ 365.00
	Priming coat: 20 Sqm. Rate As per items No. 12.31.3. "A"	Sqm	20.00	₹ 26.80	₹ 536.00
	CC 1:3:6 to fix pin clamps Rate as per items No. 4.2.5 of SH:4 "A"	Cum.	0.064	₹ 3,112.70	₹ 199.21
	b. Carriage:				
	Carriage of materials	LS	7.00	₹ 1.00	₹ 7.00
	c. Labours: (manufacturing, fitting-fixing all etc.)				
0215	Fitter (Grade 1)	Day	1.55	₹ 380.00	₹ 589.00
0203	Beldar	Day	1.55	₹ 300.00	₹ 465.00
0219	Mason 1st Class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mason 2nd class	Day	0.12	₹ 380.00	₹ 45.60
	d. Extra charges for CM for repairs after fixing hold fast, scaffolding, transport to site etc. : @ 1.50% on total ex/c "A".	1.5%	on	₹ 14,272.60	₹ 214.09
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 14,486.69	₹ 217.30
	f. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 14,703.99	₹ 441.12
	g. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 15,145.11	₹ 2,271.77
				Total	₹ 18,152.09
		Total cost for 1 Sqm.			₹ 2,420.28
				Say,	₹ 2,420.30

9.6.2 80x1.20 mm M.S. laths with 1.20 mm thick top cover.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a shutter of size 3mx2.5m = 7.5sqm.	Sqm.			
	a. Materials:				
09017	Rolling shutter complete	Sqm	7.50	₹ 1,200.00	₹ 9,000.00
09021	Top Cover	Metre	3.00	₹ 350.00	₹ 1,050.00
09002	Coiled type spring	Each	1.00	₹ 365.00	₹ 365.00
	Priming coat: 20 Sqm. Rate As per items No. 13.50.3. "A"	Sqm	20.00	₹ 26.80	₹ 536.00
	CC 1:3:6 to fix pin clamps Rate as per items No. 4.2.5 of SH:4 "A"	Cum.	0.064	₹ 3,112.70	₹ 199.21
	b. Carriage:				
	Carriage of materials	LS	7.00	₹ 1.00	₹ 7.00
	c. Labours:				
0215	Fitter (Grade 1)	Day	1.55	₹ 380.00	₹ 589.00
0203	Beldar	Day	1.55	₹ 300.00	₹ 465.00
0219	Mason 1st Class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mason 2nd class	Day	0.12	₹ 380.00	₹ 45.60
	d. Extra charges for CM for repairs after fixing hold fast, scaffolding, transport to site etc. : @ 1.85% on total ex/c "A".	1.85%	on	₹ 11,572.60	₹ 214.09
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 11,786.69	₹ 176.80
	f. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 11,963.49	₹ 358.90

	g. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 12,322.39	₹ 1,848.36
				Total	₹ 14,905.96
		Total cost for 1 Sqm.			₹ 1,987.46
				Say,	₹ 1,987.50

9.6.3 80x0.90 mm M.S. laths with 0.90 mm thick top cover.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a shutter of size 3mx2.5m = 7.5sqm.	Sqm.			
	a. Materials:				
09018	Rolling shutter	Sqm	7.50	₹ 1,100.00	₹ 8,250.00
09020	Top Cover	Metre	2.50	₹ 330.00	₹ 825.00
09002	Coiled type spring	Each	1	₹ 365.00	₹ 365.00
	Priming coat: 20 Sqm. Rate As per items No. 13.50.3. "A"	Sqm	20.00	₹ 26.80	₹ 536.00
	CC 1:3:6 to fix pin clamps Rate as per items No. 4.2.5 of SH:4 "A"	Cum.	0.064	₹ 3,112.70	₹ 199.21
	b. Carriage:				
	Carriage of materials	LS	7.00	₹ 1.00	₹ 7.00
	c. Labours:				
0215	Fitter (Grade 1)	Day	1.55	₹ 380.00	₹ 589.00
0203	Beldar	Day	1.55	₹ 300.00	₹ 465.00
0219	Mason 1st Class	Day	0.12	₹ 425.00	₹ 51.00
0220	Mason 2nd class	Day	0.12	₹ 380.00	₹ 45.60
	d. Extra charges for CM for repairs after fixing hold fast, scaffolding, transport to site etc. : @ 2.00% on total ex/c "A".	2.0%	on	₹ 10,597.60	₹ 211.95
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 10,809.55	₹ 162.14
	f. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 10,971.69	₹ 329.15
	g. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 11,300.84	₹ 1,695.13
				Total	₹ 13,731.18
		Total cost for 1 Sqm.			₹ 1,830.82
				Say,	₹ 1,830.80

9.7 Providing and fixing ball bearing for rolling shutters (exceeding 10 sqm area) of approved make complete as required.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			
	a. Materials:				
09003	Ball bearing	Each	1	₹ 300.00	₹ 300.00
	b. Carriage:				
	Carriage of materials	LS	0.50	₹ 1.00	₹ 0.50
	c. Labours:				
0215	Fitter (Grade 1)	Day	0.10	₹ 380.00	₹ 38.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 338.50	₹ 5.08
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 343.58	₹ 10.31
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 353.89	₹ 53.08
				Total	₹ 406.97
				Say,	₹ 407.00

9.8 Extra for providing & fixing mechanical device chain and crank operation for operating rolling shutters of approved make complete as required:-

9.8.1 Exceeding 10.00 sqm and upto 16.80 sqm in the area.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one sqm.	Sqm.			
	a. Materials:				
09006	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 10.00 sq.m and upto 16.80 sq.m area of door	Sqm.	1.00	₹ 630.00	₹ 630.00

	b. Carriage:				
	Carriage of materials	LS	0.50	₹ 1.00	₹ 0.50
	c. Labours:				
0215	Fitter (Grade 1)	Day	0.035	₹ 380.00	₹ 13.30
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 643.80	₹ 9.66
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 653.46	₹ 19.60
	f. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 673.06	₹ 100.96
				Total	₹ 774.02
				Say,	₹ 774.00

9.8.2 Exceeding 16.80 sqm in area.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one sqm.	Sqm.			
	a. Materials:				
09007	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 16.80 sq.m area of door	Sqm.	1.00	₹ 630.00	₹ 630.00
	b. Carriage:				
	Carriage of materials	LS	0.50	₹ 1.00	₹ 0.50
	c. Labours:				
0215	Fitter (Grade 1)	Day	0.035	₹ 380.00	₹ 13.30
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 643.80	₹ 9.66
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 653.46	₹ 19.60
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 673.06	₹ 100.96
				Total	₹ 774.02
				Say,	₹ 774.00

9.9 Extra for providing & fixing grilled rolling shutters manufactured out of 8 mm dia. M.S. plain bar instead of laths as per design approved by Engineer-in-charge (area of grill to be measured) complete as required.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a shutter of width 2.5m and grill height 0.6m Grill Area = 1.50sqm.	Sqm.			
	a. Materials:				
09020	Extra for providing grilled rolling shutter manufactured out of 8mm dia. M.S. bar instead of laths	Sqm.	1.50	₹ 290.00	₹ 435.00
	b. Carriage:				
	(Already considered in original item)				
	c. Labours:				
	(Already considered in original item)				
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 435.00	₹ 6.53
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 441.53	₹ 13.25
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 454.78	₹ 68.22
				Total	₹ 523.00
		Total cost for 1 Sqm.			₹ 348.67
				Say,	₹ 348.70

9.10 Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.

9.10.1 Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 17.50Kg.	Kg.			
	a. Materials:				
05056	(i) Tee iron 40x40x6mm = 2m+2m+lm = 5 metres 5 metres @3.5Kg/m = 17.5kg.+ Add wastage @ 5% = 0.87Kg. '= 18.37 kg. Say 0.18 qunital	Qtl.	0.180	₹ 4,267.00	₹ 768.06

05038	(ii) M.S. bars 10mm = 1x1m = 1 metre 1 metre @ 0.60kg/m = 0.60Kg.+ Add wastage @ 5% = 0.03Kg.'= 0.63 Kg. Say = 0.006 qunital	Qtl.	0.006	₹ 4,055.00	₹ 24.33
1008	(iii) M.S. flat 15x3mm = 6x10cm = 0.60 metre 0.6 metre @ 0.35kg/m = 0.21 Kg+ Add wastage @ 5% = 0.01 Kg. '= 0.22 kg.	Qtl.	0.002	₹ 3,992.00	₹ 7.98
	Cement concrete block 1:3:6- 6x15x10x10cm= 0.009 cum (Rate as per item no.4.2.11 of SH:4) ("A")	Cum.	0.009	₹ 6,656.30	₹ 59.91
08061	Butt hinges-100x58x 1.90mm	10 Nos	6.00	₹ 100.00	₹ 60.00
	For screws and nuts and bolts	L.S.	35.88	₹ 1.26	₹ 45.21
	For applying steel primer	L.S.	17.94	₹ 1.26	₹ 22.60
	b. Carriage:				
	Carriage of materials	LS	5.33	₹ 1.26	₹ 6.72
	c. Labours: (for fixing in position)				
0207	Blacksmith 2nd class	Day	0.10	₹ 380.00	₹ 38.00
0215	Fitter (Grade 1)	Day	0.15	₹ 380.00	₹ 57.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	d. Cost for making frames, cement mortars 1:3 etc. @3% on total ex/c "A"	3%	on	₹ 1,089.90	₹ 32.70
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A"	1.5%	on	₹ 1,122.60	₹ 16.84
	f. Sundries & contingencies: @ 3% on total ex/c "A"	3%	on	₹ 1,139.44	₹ 34.18
	g. Contractor's profit & overheads: @ 15% on total ex/c "A"	15%	on	₹ 1,173.62	₹ 176.04
				Total	₹ 1,409.57
			Total cost for 1 Kg.		₹ 80.55
				Say,	₹ 80.60

9.10.2 Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 17.50Kg.	Kg.			
	a. Materials:				
05056	(i) Tee iron 40x40x6mm = 2m+2m+1m = 5 metres 5 metres @3.5Kg/m = 17.5kg.+ Add wastage @ 5% = 0.87Kg. '= 18.37 kg. Say 0.18 qunital	Qtl.	0.180	₹ 4,267.00	₹ 768.06
05038	(ii) M.S. bars 10mm = 1x1m = 1 metre 1 metre @ 0.60kg/m = 0.60Kg.+ Add wastage @ 5% = 0.03Kg.'= 0.63 Kg. Say = 0.006 qunital	Qtl.	0.006	₹ 4,055.00	₹ 24.33
08061	Butt hinges-100x58x 1.90mm	10 Nos	6.00	₹ 100.00	₹ 60.00
	For screws and nuts and bolts	L.S.	35.88	₹ 1.26	₹ 45.21
	For applying steel primer	L.S.	17.94	₹ 1.26	₹ 22.60
	b. Carriage:				
	Carriage of materials	LS	5.33	₹ 1.26	₹ 6.72
	c. Labours: (for fixing in position)				
0207	Blacksmith 2nd class	Day	0.10	₹ 380.00	₹ 38.00
0215	Fitter (Grade 1)	Day	0.15	₹ 380.00	₹ 57.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	d. Cost for making frames, cement mortars 1:3 etc. @ 3% on total	3%	on	₹ 1,081.92	₹ 32.46
	e. Water charges & electricity charges: @ 1.50% on total	1.5%	on	₹ 1,114.38	₹ 16.72
	f. Sundries & contingencies: @ 3% on total	3%	on	₹ 1,131.10	₹ 33.93
	g. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 1,165.03	₹ 174.75
				Total	₹ 1,339.78
			Total cost for 1 Kg.		₹ 76.56
				Say,	₹ 76.60

9.11 Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat pieces to the existing T-iron frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-in-Charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 17.50Kg.	Kg.			
	a. Materials:				

05056	(i) Tee iron 40x40x6mm = 2m+2m+lm = 5 metres 5 metres @3.5Kg/m = 17.5kg.+ Add wastage @ 5% = 0.87Kg. '= 18.37 kg. Say 0.18 qunital	Qtl.	0.180	₹ 4,267.00	₹ 768.06
05026	(ii) M.S. Flats 3x5 mm for fixing frame 6x0.05= 0.3 Metre @1.18 Kg/m= 0.354 Kg Add wastage @5% = 0.018 Kg Total= 0.37Kg. Say 0.0037 Qunital	Qtl.	0.0037	₹ 3,992.00	₹ 14.77
05038	(iii) M.S. bars 10mm = lxm = 1 metre 1 metre @ 0.60kg/m = 0.60Kg.+ Add wastage @ 5% = 0.03Kg.'= 0.63 Kg. Say = 0.006 qunital	Qtl.	0.006	₹ 4,055.00	₹ 24.33
09022	Welding by electric plant	cm	16.00	₹ 2.00	₹ 3.20
	For applying steel primer	L.S.	17.94	₹ 1.26	₹ 22.60
	b. Carriage:				
	Carriage of materials	LS	5.33	₹ 1.26	₹ 6.72
	c. Labours: (for fixing in position)				
0207	Blacksmith 2nd class	Day	0.10	₹ 380.00	₹ 38.00
0215	Fitter (Grade 1)	Day	0.15	₹ 380.00	₹ 57.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	d. Cost for making frames, cement mortars 1:3 etc. @ 3% on total	3%	on	₹ 994.68	₹ 29.84
	e. Water charges & electricity charges: @ 1.50% on total	1.5%	on	₹ 1,024.52	₹ 15.37
	f. Sundries & contingencies: @ 3% on total	3%	on	₹ 1,039.89	₹ 31.20
	g. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 1,071.09	₹ 160.66
				Total	₹ 1,231.75
		Total cost for 1 Kg.			₹ 70.39
				Say,	₹ 70.40

9.12 Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.

9.12.1 Hot finished welded type tubes

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a truss of span 8 metre weight = 119 kg.	Kg.			
	a. Materials:				
09013	Hot finished welded tubes: 50mm dia. Tube Tie beam-lx8.0m = 8.00m+ Principal rafter 2x4.30m = 8.60m '= 16.60m 16.60m @ 5.10kg./m = 84.66kg. 40mm dia. Tube Members = 2(0.45+1.25+0.90+2.15) '= 2x4.75=9.50m 9.50m @ 3.61kg/m = 34.60Kg. Total = 118.96kg.Add wastage @ 5% = 5.94Kg.'= 124.90Kg. say 125 kg	Kg.	125.00	₹ 56.00	₹ 7,000.00
09022	Welding in/c wages for welder	Cm	357.00	₹ 2.00	₹ 714.00
	Priming coat: 50mm dia. tube 16.60x0.157m = 1.61 sqm.40mm dia. tube 9.50x0.125m = 1.91 sqm.'= 2.80 sqm.(Rate as per item 12.33.3 of S.H. finishing) "A"	Sqm.	2.80	₹ 26.80	₹ 75.04
	b. Carriage:				
0468	Carriage of tubes	Tonne	0.125	₹ 110.94	₹ 13.87
	c. Labours: For cutting, assembling & erection				
0206	Blacksmith 1st class	Day	1.50	₹ 425.00	₹ 637.50
0201	Bandhani	Day	0.75	₹ 300.00	₹ 225.00
0203	Beldar	Day	5.50	₹ 300.00	₹ 1,650.00
	d. Cost for bolts, nuts,, washers, scaffolding, hoisting etc. @ 3% on total ex/c "A"	3%	on	₹ 10,240.37	₹ 307.21
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A"	1.5%	on	₹ 10,547.58	₹ 158.21
	f. Sundries & contingencies: @ 3% on total ex/c "A"	3%	on	₹ 10,705.79	₹ 321.17
	g. Contractor's profit & overheads: @ 15% on total ex/c "A"	15%	on	₹ 11,026.96	₹ 1,654.04
				Total	₹ 12,756.04
		Total cost for 1 Kg.			₹ 107.19
				Say,	₹ 107.20

9.12.2 Hot finished seamless type tubes

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a truss of span 8 metre weight = 119 kg.	Kg.			

	a. Materials:				
09012	Mild steel tubes hot finished seamless type: 50mm dia. Tube Tie beam-lx8.0m = 8.00m+ Principal rafter 2x4.30m = 8.60m '= 16.60m 16.60m @ 5.10kg./m = 84.66kg. 40mm dia. Tube Members = 2(0.45+1.25+0.90+2.15) '= 2x4.75=9.50m 9.50m @ 3.61kg/m = 34.60Kg. Total = 118.96kg.Add wastage @ 5% = 5.94Kg.'= 124.90Kg. say 125 kg	Kg.	125.00	₹ 60.00	₹ 7,500.00
09022	Welding	Cm	357.00	₹ 2.00	₹ 714.00
	Priming coat: 50mm dia. tube 16.60x0.157m = 1.61 sqm.40mm dia. tube 9.50x0.125m = 1.91 sqm.'= 2.80 sqm.(Rate as per item 12.33.3 of S.H. finishing) "A"	Sqm.	2.80	₹ 26.80	₹ 75.04
	b. Carriage:				
0468	Carriage of tubes	Tonne	0.125	₹ 110.94	₹ 13.87
	c. Labours: For cutting, assembling & erection				
0206	Blacksmith 1st class	Day	1.50	₹ 425.00	₹ 637.50
0201	Bandhani	Day	0.75	₹ 300.00	₹ 225.00
0203	Beldar	Day	5.50	₹ 300.00	₹ 1,650.00
	d. Cost for bolts, nuts,, washers, scaffolding, hoisting etc. @ 3% on total ex/c "A"	3%	on	₹ 10,740.37	₹ 322.21
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A"	1.5%	on	₹ 11,062.58	₹ 165.94
	f. Sundries & contingencies: @ 3% on total ex/c "A"	3%	on	₹ 11,228.52	₹ 336.86
	g. Contractor's profit & overheads: @ 15% on total ex/c "A"	15%	on	₹ 11,565.38	₹ 1,734.81
				Total	₹ 13,375.23
		Total cost for 1 Kg.			₹ 112.40
				Say,	₹ 112.40

9.12.3 Electric resistance or induction butt welded tubes.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a truss of span 8 metre weight = 119 kg.	Kg.			
	a. Materials:				
09011	Electric resistance or Induction on butt welded tubes: 50mm dia. Tube Tie beam-lx8.0m = 8.00m+ Principal rafter 2x4.30m = 8.60m '= 16.60m 16.60m @ 5.10kg./m = 84.66kg. 40mm dia. Tube Members = 2(0.45+1.25+0.90+2.15) '= 2x4.75=9.50m 9.50m @ 3.61kg/m = 34.60Kg. Total = 118.96kg.Add wastage @ 5% = 5.94Kg.'= 124.90Kg. say 125 kg	Kg.	125.00	₹ 65.00	₹ 8,125.00
09022	Welding	Cm	357.00	₹ 2.00	₹ 714.00
	Priming coat: 50mm dia. tube 16.60x0.157m = 1.61 sqm.40mm dia. tube 9.50x0.125m = 1.91 sqm.'= 2.80 sqm.(Rate as per item 12.33.3 of S.H. finishing) "A"	Sqm.	2.80	₹ 26.80	₹ 75.04
	b. Carriage:				
0468	Carriage of tubes	Tonne	0.125	₹ 110.94	₹ 13.87
	c. Labours: For cutting, assembling & erection				
0206	Blacksmith 1st class	Day	1.50	₹ 425.00	₹ 637.50
0201	Bandhani	Day	0.75	₹ 300.00	₹ 225.00
0203	Beldar	Day	5.50	₹ 300.00	₹ 1,650.00
	d. Cost for bolts, nuts,, washers, scaffolding, hoisting etc. @ 3% on total ex/c "A"	3%	on	₹ 11,365.37	₹ 340.96
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A"	1.5%	on	₹ 11,706.33	₹ 175.59
	f. Sundries & contingencies: @ 3% on total ex/c "A"	3%	on	₹ 11,881.92	₹ 356.46
	g. Contractor's profit & overheads: @ 15% on total ex/c "A"	15%	on	₹ 12,238.38	₹ 1,835.76

			Total	₹ 14,149.18
		Total cost for 1 Kg.		₹ 118.90
		Say,		₹ 118.90

9.13 Providing and fixing fan clamp type-I of 16 mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs during laying including painting the exposed portion of loop, all as per standard design complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 clamp	Each			
	a. Materials:				
05039	16mm dia. M.S. bar 1m @ 1.58 kg/m 1x1.58 = 1.58Kg+Add wastage @ 5% = 0.08 Kg.'= 1.66 Kg.	Qtl.	0.0166	₹ 4,010.00	₹ 66.57
	Priming coat & painting: (Rate as per item 12.33.3 of S.H. finishing) "A"	Sqm.	0.025	₹ 26.80	₹ 0.67
	b. Carriage:				
0468	Carriage of bars	Tonne	0.00166	₹ 110.94	₹ 0.18
	c. Labours:				
0207	Blacksmith 2nd class	Day	0.040	₹ 380.00	₹ 15.20
0203	Beldar	Day	0.040	₹ 300.00	₹ 12.00
	d. Cost for scaffolding, etc. @ 0.5% on total ex/c "A"	0.5%	on	₹ 93.95	₹ 0.47
	e. Water charges : @ 1% on total ex/c "A"	1%	on	₹ 94.42	₹ 0.94
	f. Sundries & contingencies: @ 3% on total ex/c "A"	3%	on	₹ 95.36	₹ 2.86
	g. Contractor's profit & overheads: @ 15% on total ex/c "A"	15%	on	₹ 98.22	₹ 14.73
		Total cost for 1 No.		Total	₹ 113.62
				Say,	₹ 113.60

9.14 Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S. sheet box by means of 3.3mm dia. round headed screws, one lock at the corners. Clamp shall be made of 12mm dia M.S. bar bent to shape, including painting the exposed portion as per standard drawing complete as required (provided incase of low ceiling height).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost of one box clamp	Each			
	a. Materials:				
09014	Circular C.I. Box including bottom and top lids 12mm dia. M.S. bar 80cm @ 0.9kg/m - 0.72kg+ Add wastage @ 5% - 0.036	Each	1.000	₹ 60.00	₹ 60.00
05038	12mm dia. M.S. bar 80cm @ 0.9kg/m - 0.72kg+ Add wastage @ 5% - 0.0360.756 kg. Say 0.008 q	quintal	0.008	₹ 4,055.00	₹ 32.44
	b. Labours:				
0207	Blacksmith 2nd class	Day	0.030	₹ 380.00	₹ 11.40
0203	Beldar	Day	0.030	₹ 300.00	₹ 9.00
	c. Cost for carriage, priming coat & painting, scaffolding for fixing, etc. @ 2% on total	2%	on	₹ 112.84	₹ 2.26
	d. Water charges : @ 1.0% on total.	1%	on	₹ 115.10	₹ 1.15
	e. Sundries (carriage, fixing, painting etc) & contingencies: @ 3% on total.	3%	on	₹ 116.25	₹ 3.49
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 119.74	₹ 17.96
		Total cost for 1 No.		Total	₹ 137.70
				Say,	₹ 137.70

9.15 Steel work welded in built up section/framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using steel etc. complete as required:-

9.15.1 In stringers, treads, landing etc. of stair cases including use of chequered plate wherever required, all complete.

Code	Description	Unit	Quantity	Rate	Amount
	Consider a flight of staircase of 2.8m height with tread and riser of 200mm & 0.60m wide.	Kg.			
	a. Materials:				

05056	(i) Unequal angles as stringers-75x50x6mm 4x12.69x5.6 = 284.25 Kg. Add wastage @ 5% =14.21 Kg.'= 298.46kg. Say 2.985q (ii) unequal angles at sides 50x30x5mm 2x14x0.2x3.00=16.8kg. Add wastage @ 5% = 0.84kg.'= 17.64 kg. Say 0.176q = 3.161q	Qtl.	3.161	₹ 4,267.00	₹ 13,487.99
05036	(iii) Plate for tread 8mm thick 14x7.5= 105.00kg+14x7.5= 105.00kg+Add wastage @ 5% = 5.25kg.'= 110.25kg. Say 1.103q	Qtl.	1.103	₹ 5,141.00	₹ 5,670.52
19032	(iv) G.I pipe for railing 40mm 2x12.69m = 25.38m+Add wastage @ 5% = 1.27m = 26.65m	Metre	26.65	₹ 240.00	₹ 6,396.00
05039	(v) M.S. round bars 16mm dia.15x0.75x2x1.58 = 35.55kg.+Add wastage @ 5% = 1.78kg.'= 37.33 Kg. Say 0.373q	Qtl.	0.373	₹ 4,010.00	₹ 1,495.73
	Applying priming coat(i) steps 2.4x 14 = 33.60sqm.+(ii) angles 4x 12.69x0.25 = 12.69sqm.+(iii) Bars and other components = 2.00 sqm.(L.S.)(A) (Rate as per item no. 12.33.3)	Sqm.	48.29	₹ 26.80	₹ 1,294.17
09022	Welding charge (electric) 23.20m	Cm.	2320.00	₹ 2.00	₹ 4,640.00
	b. Carriage:				
0468	Carriage of materials	Tonne	0.4637	₹ 110.94	₹ 51.44
0427	Carriage of GI pipes 3.72x26.65=99.14kg.	Tonne	0.0990	₹ 110.94	₹ 10.98
	c. Labours:				
0206	Blacksmith 1st class	day	1.85	₹ 425.00	₹ 786.25
0203	Beldar	day	1.25	₹ 300.00	₹ 375.00
0201	Bandhani	day	0.60	₹ 300.00	₹ 180.00
	d. Cost for bolts, nuts, special type of washers, transport to site, scaffolding for fixing/ hoisting materials etc. @ 2% on total	2%	on	₹ 33,093.91	₹ 661.88
	d. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 33,755.79	₹ 506.34
	e. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 34,262.13	₹ 1,027.86
	f. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 35,289.99	₹ 5,293.50
	Cost of 5.331 qunital			Total	₹ 41,877.66
		Total cost for 1 Kg.			₹ 78.55
				Say,	₹ 78.60

9.15.2 In grating, frames, guard bar, railing, brackets, gates and similar works, all complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of 1m x 1m framed guard bar grating.	Kg.			
	a. Materials:				
1008	(i) M.S. flat 50x6 mm 2.4kg/per metre5.75x2.40 = 13.8kg. + Add wastage@' = 0.69kg., Total =14.49kg. say 14.5 kg.	Qtl.	0.145	₹ 3,992.00	₹ 578.84
05038	(ii) 12mm dia. Bars @ 0.89 kg/m9x1 = 9 metre @ 0.89kg/m = 8.01 kg+Addwastage @ 5% = 0.40kg. Total=8.41 kg.say 0.084q	Qtl.	0.084	₹ 4,055.00	₹ 340.62
09022	Welding charges (electric) 60cm	Cm.	60.00	₹ 2.00	₹ 120.00
	Applying priming coat 0.60 sqm (Rate as per item no. 12.33.3 "A "	Sqm.	0.60	₹ 26.80	₹ 16.08
	b. Carriage:				
0468	Carriage of materials	Tonne	0.0229	₹ 110.94	₹ 2.54
	c. Labours:				
0206	Blacksmith 1st class	day	0.70	₹ 425.00	₹ 297.50
0203	Beldar	day	0.50	₹ 300.00	₹ 150.00
0201	Bandhani	day	0.25	₹ 300.00	₹ 75.00
	d. Cost for bolts, nuts, special type of washers, transport to site, scaffolding for fixing/ hoisting materials etc. @ 2% on total	2%	on	₹ 1,561.96	₹ 31.24
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 1,593.20	₹ 23.90

	f. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 1,617.10	₹ 48.51
	g. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 1,665.61	₹ 249.84
	Cost of 0.218 qunital			Total	₹ 1,934.07
		Total cost for 1 Kg.			₹ 88.72
				Say,	₹ 88.70

9.16 Providing and fixing hand rail using structural steel etc. of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer complete as required:-

9.16.1 M.S. tube

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for hand rail of railing of twoflights of staircase, length of hand rail =5.40m	Kg.			
	a. Materials:				
09013	M.S. tube 40mm nominal bore (medium) =5.40m @ 3.61kg/m= 19.49kg Add wastage @ 5% =0.097Total = 20.46 kg.	Kg.	20.46	₹ 56.00	₹ 1,145.76
09022	Welding charges (joints of hand rail and ballustards) 18x4x1.00 = 72cm	Cm.	72.00	₹ 2.00	₹ 144.00
	Priming coat 40mmdia.Tube-5.4x22/7x0.0483= 0.82 sqm Rate as per item no 12.33.3 SH Finishing "A"	Sqm.	0.82	₹ 26.80	₹ 21.98
	b. Carriage:				
0468	Carriage of materials	Tonne	0.0205	₹ 110.94	₹ 2.27
	c. Labours: for cutting assembling & erection				
0206	Blacksmith 1st class	day	0.240	₹ 425.00	₹ 102.00
0203	Beldar	day	0.900	₹ 300.00	₹ 270.00
0201	Bandhani	day	0.120	₹ 300.00	₹ 36.00
	d. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 1,700.03	₹ 25.50
	e. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 1,725.53	₹ 51.77
	f. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 1,777.30	₹ 266.60
	Cost of 19.49			Total	₹ 2,065.88
		Total cost for 1 Kg.			₹ 106.00
				Say,	₹ 106.00

9.16.2 E.R.W. tubes.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for hand rail of railing of twoflights of staircase, length of hand rail =5.40m	Kg.			
	a. Materials:				
09011	E.R.W. tube 40mm nominal bore = 5.40m @3.28kg/m= 17.31kgAdd wastage @ 5% = 0.88 kgTotal = 18.59 kg	Kg.	18.59	₹ 65.00	₹ 1,208.35
09022	Welding charges (joints of hand rail andballustards) 18x4x1.00 = 72cm	Cm.	72.00	₹ 2.00	₹ 144.00
	Priming coat 40mmdia.Tube-5.4x22/7x0.0483= 0.82 sqm Rate as per item no 12.33.3 SH Finishing "A"	Sqm.	0.82	₹ 26.80	₹ 21.98
	b. Carriage:				
0468	Carriage of materials	Tonne	0.0186	₹ 110.94	₹ 2.06
	c. Labours: for cutting assembling & erection				
0206	Blacksmith 1st class	day	0.240	₹ 425.00	₹ 102.00
0203	Beldar	day	0.900	₹ 300.00	₹ 270.00
0201	Bandhani	day	0.120	₹ 300.00	₹ 36.00
	d. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 1,762.41	₹ 26.44
	e. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 1,788.85	₹ 53.67

	f. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 1,842.52	₹ 276.38
	Cost of 17.71 Kg.			Total	₹ 2,140.88
		Total cost for 1 Kg.			₹ 120.89
				Say,	₹ 120.90

9.16.3 G.I.pipes.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for hand rail of railing of two flights of staircase, length of hand rail =5.40m	Kg.			
	a. Materials:				
19032	G.I. pipe 40mm nominal bore = 5.40m Add wastage @ 5% = 0.27m Total = 5.67m	Metre	5.67	₹ 240.00	₹ 1,360.80
09022	Welding charges (joints of hand rail and ballusters) 18x4x1.00 = 72cm	Cm.	72.00	₹ 2.00	₹ 144.00
	Priming coat 40mm dia. Tube-5.4x22/7x0.0483 = 0.82 sqm Rate as per item no 12.33.3 SH Finishing "A"	Sqm.	0.82	₹ 26.80	₹ 21.98
	b. Carriage:				
0427	Carriage of pipe (5.67m @ 3.72 kg/m =21.09kg)	tonne	0.021	₹ 110.94	₹ 2.34
	c. Labours: for cutting assembling & erection				
0206	Blacksmith 1st class	day	0.240	₹ 425.00	₹ 102.00
0203	Beldar	day	0.900	₹ 300.00	₹ 270.00
0201	Bandhani	day	0.120	₹ 300.00	₹ 36.00
	d. Water charges & electricity charges: @ 1.50% on total ex/c "A".	1.5%	on	₹ 1,915.14	₹ 28.73
	e. Sundries & contingencies: @ 3% on total ex/c "A".	3%	on	₹ 1,943.87	₹ 58.32
	f. Contractor's profit & overheads: @ 15% on total ex/c "A".	15%	on	₹ 2,002.19	₹ 300.33
	Cost of 20.09 Kg.			Total	₹ 2,324.50
		Total cost for 1 Kg.			₹ 115.70
				Say,	₹ 115.70

9.17 Providing and fixing M.S. round holding down bolts with nuts and washer plates complete as per standard design.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one bolt 16mm dia. And 300mm long.	Kg.			
	a. Materials:				
05017	0.30m @ 1.58kg/m = 0.474 kg = 0.0048q	quintal	0.0048	₹ 5,200.00	₹ 24.96
05036	Plate-100x100x6mm @ 47kg/sqm.Wt. = 0.47kg. = 0.005q	quintal	0.005	₹ 5,141.00	₹ 25.71
	b. Carriage:				
0468	Carriage of materials	Tonne	0.001	₹ 110.94	₹ 0.11
	c. Labours:				
0207	Blacksmith 2nd class	day	0.030	₹ 380.00	₹ 11.40
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 62.18	₹ 0.93
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 63.11	₹ 1.89
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 65.00	₹ 9.75
	Cost of 0.0098q			Total	₹ 74.75
		Total cost for 1 Kg.			₹ 76.28
				Say,	₹ 76.30

9.18 Providing and fixing MS bolts including nuts and washers complete as per standard design:-**9.18.1 Upto 300mm length.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.10q of nuts and washers	Kg.			
	a. Materials:				
05017	Bolts, nuts and washers	quintal	0.100	₹ 5,200.00	₹ 520.00

	b. Carriage:				
0468	Carriage of materials	Tonne	0.010	₹ 110.94	₹ 1.11
	c. Labours:				
0207	Blacksmith 2nd class	day	0.380	₹ 380.00	₹ 144.40
0203	Beldar	day	0.380	₹ 300.00	₹ 114.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 779.51	₹ 11.69
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 791.20	₹ 23.74
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 814.94	₹ 122.24
	Cost of 0.10q			Total	₹ 937.18
		Total cost for 1 Kg.			₹ 93.72
				Say,	₹ 93.70

9.18.2 Above 300mm length.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.10q of nuts and washers	Kg.			
	a. Materials:				
05016	Bolts, nuts and washers	quintal	0.100	₹ 5,350.00	₹ 535.00
	b. Carriage:				
0468	Carriage of materials	Tonne	0.010	₹ 110.94	₹ 1.11
	c. Labours:				
0207	Blacksmith 2nd class	day	0.380	₹ 380.00	₹ 144.40
0203	Beldar	day	0.380	₹ 300.00	₹ 114.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 794.51	₹ 11.92
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 806.43	₹ 24.19
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 830.62	₹ 124.59
	Cost of 0.10q			Total	₹ 955.21
		Total cost for 1 Kg.			₹ 95.52
				Say,	₹ 95.50

9.19 Providing and fixing M.S. rivets of sizes in position complete as per standard design.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.10q of rivets	Kg.			
	a. Materials:				
05037	Rivets	quintal	0.10	₹ 5,292.00	₹ 529.20
	b. Carriage:				
0468	Carriage of materials	Tonne	0.01	₹ 110.94	₹ 1.11
	c. Labours:				
0215	Fitter (Grade I)	day	0.83	₹ 380.00	₹ 315.40
0204	Beldar Skilled	day	0.83	₹ 340.00	₹ 282.20
	d. Water charges & electricity charges: @ 3% on total.	3%	on	₹ 1,127.91	₹ 33.84
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,161.75	₹ 34.85
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,196.60	₹ 179.49
	Cost of 0.10q			Total	₹ 1,376.09
		Total cost for 1 Kg.			₹ 137.61
				Say,	₹ 137.60

9.20 Welding by gas or electric plant including transportation of plant at site etc. complete as per standard design.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one cm.	Cm			
	a. Materials:				
09023	Welding by gas /electric plant in/c wages for welder.	cm	1.00	₹ 2.00	₹ 2.00
	b. Carriage:				
0468	Carriage of materials	(Already included)			
	c. Labours:	(Already included)			
	d. Extra for transportation of welding plant at site: @ 5% on total.	5%	on	₹ 2.00	₹ 0.10

	e. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 2.10	₹ 0.03
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 2.13	₹ 0.06
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 2.19	₹ 0.33
				Total	₹ 2.52
				Say,	₹ 2.50

9.21 Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm²), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.

9.21.1 10 x 60 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos.	each			
	a. Materials:				
09024	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 60mm	10 Nos.	10	₹ 286.00	₹ 286.00
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 286.00	₹ 2.86
	c. Labours:				
0220	Mason (brick layer) 2nd class	day	0.400	₹ 380.00	₹ 152.00
0203	Beldar	day	0.400	₹ 300.00	₹ 120.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 560.86	₹ 8.41
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 569.27	₹ 17.08
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 586.35	₹ 87.95
	Cost of 10 Nos.			Total	₹ 674.30
		Total cost for 1 No.			₹ 67.43
				Say,	₹ 67.40

9.21.2 10 x 80 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos.	each			
	a. Materials:				
09025	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 80mm	10 Nos.	10	₹ 330.00	₹ 330.00
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 330.00	₹ 3.30
	c. Labours:				
0220	Mason (brick layer) 2nd class	day	0.400	₹ 380.00	₹ 152.00
0203	Beldar	day	0.400	₹ 300.00	₹ 120.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 605.30	₹ 9.08
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 614.38	₹ 18.43
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 632.81	₹ 94.92
	Cost of 10 Nos.			Total	₹ 727.73
		Total cost for 1 No.			₹ 72.77
				Say,	₹ 72.80

9.21.3 10 x 120 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos.	each			
	a. Materials:				
09026	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 120mm	10 Nos.	10	₹ 400.00	₹ 400.00
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 400.00	₹ 4.00
	c. Labours:				
0220	Mason (brick layer) 2nd class	day	0.500	₹ 380.00	₹ 190.00
0203	Beldar	day	0.500	₹ 300.00	₹ 150.00

	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 744.00	₹ 11.16
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 755.16	₹ 22.65
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 777.81	₹ 116.67
	Cost of 10 Nos.			Total	₹ 894.48
		Total cost for 1 No.			₹ 89.45
				Say,	₹ 89.50

9.21.4 10 x 140 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos.	each			
	a. Materials:				
09027	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 140mm	10 Nos.	10	₹ 505.00	₹ 505.00
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 505.00	₹ 5.05
	c. Labours:				
0220	Mason (brick layer) 2nd class	day	0.500	₹ 380.00	₹ 190.00
0203	Beldar	day	0.500	₹ 300.00	₹ 150.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 850.05	₹ 12.75
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 862.80	₹ 25.88
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 888.68	₹ 133.30
	Cost of 10 Nos.			Total	₹ 1,021.98
		Total cost for 1 No.			₹ 102.20
				Say,	₹ 102.20

9.21.5 10 x 160 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos.	each			
	a. Materials:				
09028	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10mm x 160mm	10 Nos.	10	₹ 630.00	₹ 630.00
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 630.00	₹ 6.30
	c. Labours:				
0220	Mason (brick layer) 2nd class	day	0.600	₹ 380.00	₹ 228.00
0203	Beldar	day	0.600	₹ 300.00	₹ 180.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,044.30	₹ 15.66
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,059.96	₹ 31.80
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,091.76	₹ 163.76
	Cost of 10 Nos.			Total	₹ 1,255.52
		Total cost for 1 No.			₹ 125.55
				Say,	₹ 125.60

9.22 Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, including fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2kg	each			
	a. Materials:				
09029	Qty= 2kg + Add wastage @ 5% = 0.10 Total = 2.1 kg Stainless steel (Grade-304) hollow section round/square tubes	kg	2.10	₹ 250.00	₹ 525.00
09030	Stainless steel bolts/square bar and plates	kg	1.00	₹ 130.00	₹ 130.00

	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 655.00	₹ 6.55
	c. Labours: For fabrication, assembling, erection, welding, curvating, grinding, buffing etc.				
0206	Blacksmith 1st class	day	0.060	₹ 425.00	₹ 25.50
0203	Beldar	day	0.200	₹ 300.00	₹ 60.00
0201	Bandhani	day	0.020	₹ 300.00	₹ 6.00
	d. Welding charges: @ 1.50% on total.	6%	on	₹ 753.05	₹ 45.18
	e. Curvating, grinding, finishing, buffing charges: @ 1.50% on total.	5%	on	₹ 753.05	₹ 37.65
	f. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 835.88	₹ 12.54
	h. Sundries & contingencies: @ 3% on total.	3%	on	₹ 848.42	₹ 25.45
	i. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 873.87	₹ 131.08
	Cost of 2 kg			Total	₹ 1,004.95
		Total cost for 1 kg			₹ 502.48
				Say,	₹ 502.50

9.23 Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.

9.23.1 Galvanised M.S. Wire gauze with 0.63 mm dia wire and 1.4 mm aperture on both sides

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a window shutter 1.40x1.10=1.54 sqm	sqm			
	a. Materials:				
09031	Wire gauze 1.40x1.10=1.54 sqm Add wastage @ 10 %=0.15 sqm Total=1.69 sqm Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia. of wire 0.63 mm	sqm	1.69	₹ 286.00	₹ 483.34
05026	M.S. Flat 15x3=2x(1.40+1.10)=5.0 metre Add wastage @ 5%=0.25 m Total=5.25 m 5.25@0.35kg/m=1.84 kg Flats upto 10 mm in thickness	qtl.	0.018	₹ 3,992.00	₹ 71.86
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 555.20	₹ 5.55
	c. Labours:				
0207	Blacksmith 2nd class	day	0.340	₹ 380.00	₹ 129.20
0203	Beldar	day	0.060	₹ 300.00	₹ 18.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 707.95	₹ 10.62
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 718.57	₹ 21.56
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 740.13	₹ 111.02
	Cost of 1.54 sqm			Total	₹ 851.15
		Total cost for 1 sqm			₹ 552.69
				Say,	₹ 552.70

9.23.2 Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a window shutter 1.40x1.10=1.54 sqm	sqm			
	a. Materials:				
09032	Wire gauze 1.40x1.10=1.54 sqm Add wastage @ 10 %=0.15 sqm Total=1.69 sqm Stainless steel wire guage (Grade-304) aperture 1.4mm and 0.50 mm dia wire	sqm	1.69	₹ 715.00	₹ 1,208.35
05026	M.S. Flat 15x3=2x(1.40+1.10)=5.0 metre Add wastage @ 5%=0.25 m Total=5.25 m 5.25@0.35kg/m=1.84 kg Flats upto 10 mm in thickness	qtl.	0.018	₹ 3,992.00	₹ 71.86
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 555.20	₹ 5.55
	c. Labours:				
0207	Blacksmith 2nd class	day	0.340	₹ 380.00	₹ 129.20
0203	Beldar	day	0.060	₹ 300.00	₹ 18.00
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 1,432.96	₹ 21.49
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,454.45	₹ 43.63

	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,498.08	₹ 224.71
	Cost of 1.54 sqm			Total	₹ 1,722.79
		Total cost for 1 sqm			₹ 1,118.69
				Say,	₹ 1,118.70

9.24 Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :

9.24.1 4.0 mm thick glass panes

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 glass panes (area of each pane = 0.10 sqm)	sqm			
	a. Materials:				
08146	Area of glass panes =1.00 sqm + Add wastage @ 10% = 0.10 Total =1.10 sqm Area of glass panes =1.00 sqm + Add wastage @ 10% = 0.10 Total =1.10 sqm Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	1.10	₹ 360.00	₹ 396.00
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 396.00	₹ 3.96
	c. Labours:				
0217	Glazier	day	0.200	₹ 380.00	₹ 76.00
	d. Water charges : @ 1.0% on total.	1.0%	on	₹ 475.96	₹ 4.76
	e. Sundries & contingencies in/c putty, glazing clips, scaffolding @ 25% on total.	25%	on	₹ 480.72	₹ 120.18
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 600.90	₹ 90.14
	Cost of 1.00 sqm			Total	₹ 691.04
		Total cost for 1 sqm			₹ 691.04
				Say,	₹ 691.00

9.24.2 5.5 mm thick glass panes

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 glass panes (area of each pane = 0.10 sqm)	sqm			
	a. Materials:				
08147	Area of glass panes =1.00 sqm + Add wastage @ 10% = 0.10 Total =1.10 sqm Area of glass panes =1.00 sqm + Add wastage @ 10% = 0.10 Total =1.10 sqm Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm)	sqm	1.10	₹ 535.00	₹ 588.50
	b. Carriage:				
	Carriage of materials @ 1% on total.	1%	on	₹ 588.50	₹ 5.89
	c. Labours:				
0217	Glazier	day	0.200	₹ 380.00	₹ 76.00
	d. Water charges : @ 1.0% on total.	1.0%	on	₹ 670.39	₹ 6.70
	e. Sundries & contingencies in/c putty, glazing clips, scaffolding @ 25% on total.	25%	on	₹ 677.09	₹ 169.27
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 846.36	₹ 126.95
	Cost of 1.00 sqm			Total	₹ 973.31
		Total cost for 1 sqm			₹ 973.31
				Say,	₹ 973.30

9.25 Extra for providing and fixing steel beading of size 10 x 10 x 1.6 mm (box type), approved shape and section with screws instead of glazing clips and metal sash putty, in steel doors, windows, ventilators and composite units.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1 metre beading for doors, windows, Ventilators and composit units	metre			
	a. Materials:				
09033	Steel beading size 10 x 10 x 1.6 mm (box type)	metre	1.00	₹ 31.00	₹ 31.00
	Applying priming coat	LS	0.460	₹ 1.26	₹ 0.58
	Fixing charges	LS	3.010	₹ 1.26	₹ 3.79
	c. Water charges : @ 1.0% on total.	1.0%	on	₹ 35.37	₹ 0.35
	d. Sundries & contingencies @ 3% on total.	3%	on	₹ 35.72	₹ 1.07
	e. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 36.79	₹ 5.52

	Cost of 1.00 metre			Total	₹ 42.31
		Total cost for 1 metre		₹	42.31
			Say,	₹	42.30

- 9.26 Providing, fabricating, transporting, assembling and erection in position of Steel members for steel columns, built up beams using structural tubular sections (round, square or rectangular hollow tubes etc. confirming to IS 4923 / IS 1161, Yield strength 310 MPa as per latest IS Code) to the required profile & shape as called for as per the drawing & specifications and of approved make including the shear connectors /studs and fusion weld to top of horizontal member. This item also includes preparation of shop drawings and their approval, necessary templates, adequate temporary supports, scaffolding & staging, all cutting, grinding, sliding & all labour tools, plants & equipments & operations etc. required to complete the job as per drawing & specification. Every precaution to be taken to prevent rusting of sections. This item also includes all test on materials & welded fabricated parts as per specification and direction of Engineer - in - Charge. Temporary bolts & nuts (grade EN 8) to be used during assembling & shall be removed before site erection. All site erection bolts shall be HSFG type only. The item to include cost of sand blasting on materials, application of primer and epoxy paint in internal & external in fabrication shop & final painting on site including all touch up works after erection as per technical specification.**

Scope of work includes:

- Design & fabrication of any additional temporary structure including all type of lifting brackets, supporting brackets ,which will be required for transportation & erection in position / launching of fabrication part or complete element in position.
- Making provision & arrangement for required opening / inserts for fixing lights fixtures & funning cable conduits.
- All incidentials labour, equipment & plants required to execute & complete the job from fabrication to erection at final position as per drawing, specification & direction of Engineer - in -Charge.
- Cleaning & removing of all spoil, temporary arrangements for casting of deck slab/roofing.
- All safety measures required to execute & complete the work.
- Procurement of all materials from approved manufactures & fabrication. Complete methodology for structural steel work, Name of workshop for fabrication works, Testing facilities & erection procedures etc.to be intimated for approval of Engineer - in - Charge.
- The provision of temporary bearing / sand jacks for supporting steel members during erection.
- Provision of stability during erection against wind load or any other type of loading on structural steel members during erection.
- Measurement shall be only for structural steel which is erected & is part of permanent structure & paid as per approved shop drawings. All wastages, temporary works, Jigs, temporary assembly bolts etc. are deemed to be included in rates. No allowance or increse in weight for welding , nuts & bolts etc will be applicable.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a truss of span 8 metre weight = 119 kg.	Kg.			
	a. Materials:				
09034	Hollow member = 119kg. Add wastage @ 5% = 5.94Kg. = 124.90Kg. say 125 kg	Kg.	125.00	₹ 62.00	₹ 7,750.00
09022	Welding in/c wages for welder	Cm	357.00	₹ 2.00	₹ 714.00
	Priming coat (Rate as per item 12.33.3 of S.H. finishing) "A"	Sqm.	2.80	₹ 26.80	₹ 75.04
	Epoxy paint (Rate as per item 12.36.1 of S.H. finishing) "B"	Sqm.	3.80	₹ 112.00	₹ 425.60
	b. Carriage:				
0427	Carriage of tubes	Tonne	0.125	₹ 110.94	₹ 13.87
	c. Labours: For cutting, assembling & erection				
0206	Blacksmith 1st class	Day	1.50	₹ 425.00	₹ 637.50
0201	Bandhani	Day	0.75	₹ 300.00	₹ 225.00
0203	Beldar	Day	5.50	₹ 300.00	₹ 1,650.00
	d. Cost for scaffolding, hoisting, gas cutting, preparation of shop drawing etc. @ 5% on total ex/c "A" & "B"	5%	on	₹ 10,990.37	₹ 549.52
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A" & "B"	1.5%	on	₹ 11,539.89	₹ 173.10
	f. Sundries & contingencies: @ 3% on total ex/c "A" & "B"	3%	on	₹ 11,712.99	₹ 351.39
	g. Contractor's profit & overheads: @ 15% on total ex/c "A" & "B"	15%	on	₹ 12,064.38	₹ 1,809.66

			Total	₹ 14,374.68
		Total cost for 1 Kg.		₹ 120.80
			Say,	₹ 120.80

- 9.27 Providing, fabricating, transporting, assembling and erection in position of Steel members for steel columns, built up beams using structural tubular sections (confirming to IS 2062 -1999 grade B Fe 410, normalized control cooled , yield strength + 250 MPa as per latest IS Code) to the required profile & shape as called for as per the drawing & specifications and of approved make including the shear connectors /studs and fusion weld to top of horizontal member. This item also includes prepration of shop drawings and their approval, necessary templates, adequate temporary supports, scaffolding & staging, all cutting, grinding, sliding & all labour tools, plants & equipments & operations etc. required to complete the job as per drawing & specification. Every precaution to be taken to prevent rusting of sections. This item also includes all test on materials & welded fabricated parts as per specification and direction of Engineer - in - Charge. Temporary bolts & nuts (grade EN 8) to be used during assembling & shall be removed before site erection. All site erection bolts shall be HSFG type only. The item to include cost of sand blasting on materials, application of primer and epoxy paint in internal & external in fabrication shop & final painting on site including all touch up works after erection as per technical specification.**

Scope of work includes:

- Design & fabrication of any additional temporary structure including all type of lifting brackets, supporting brackets ,which will be required for transportation & erection in position / launching of fabrication part or complete element in position.
- Making provision & arrangement for required opening / inserts for fixing lights fixtures & funning cable conduits.
- All incidentals labour, equipment & plants required to execute & complete the job from fabrication to erection at final position as per drawing, specification & direction of Engineer - in -Charge.
- Cleaning & removing of all spoil, temporary arrangementa for casting of deck slab/roofing.
- All safety measures required to execute & complete the work.
- Procurement of all materials from approved manufactures & fabrication. Complete methodology for structural steel work, Name of workshop for fabrication works, Testing facilities & erection procedures etc.to be intimated for approval of Engineer - in - Charge.
- The provision of temporary bearing / sand jacks for supporting steel members during erection.
- Provision of stability during erection against wind load or any other type of loading on structural steel members during erection.
- Measurement shall be only for structural steel which is erected & is part of permanent structure & paid as per approved shop drawings. All wastages, temporary works, Jigs, temporary assembly bolts etc. are deemed to be included in rates. No allowence or increse in weight for welding , nuts & bolts etc will be applicable.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a truss of span 8 metre weight = 119 kg.	Kg.			
	a. Materials:				
09035	Structural member member = 119kg. Add wastage @ 5% = 5.94Kg. = 124.90Kg. say 125 kg	Kg.	125.00	₹ 49.00	₹ 6,125.00
09022	Welding in/c wages for welder	Cm	357.00	₹ 2.00	₹ 714.00
	Priming coat (Rate as per item 12.33.3 of S.H. finishing) "A"	Sqm.	2.80	₹ 26.80	₹ 75.04
	Epoxy paint (Rate as per item 12.36.1 of S.H. finishing) "B"	Sqm.	3.80	₹ 112.00	₹ 425.60
	b. Carriage:				
0427	Carriage of tubes	Tonne	0.125	₹ 110.94	₹ 13.87
	c. Labours: For cutting, assembling & erection				
0206	Blacksmith 1st class	Day	1.50	₹ 425.00	₹ 637.50
0201	Bandhani	Day	0.75	₹ 300.00	₹ 225.00
0203	Beldar	Day	5.50	₹ 300.00	₹ 1,650.00
	d. Cost for scaffolding, hoisting, gas cutting, preparation of shop drawing etc. @ 5% on total ex/c "A" & "B"	5%	on	₹ 9,365.37	₹ 468.27
	e. Water charges & electricity charges: @ 1.50% on total ex/c "A" & "B"	1.5%	on	₹ 9,833.64	₹ 147.50
	f. Sundries & contingencies: @ 3% on total ex/c "A" & "B"	3%	on	₹ 9,981.14	₹ 299.43
	g. Contractor's profit & overheads: @ 15% on total ex/c "A" & "B"	15%	on	₹ 10,280.57	₹ 1,542.09
				Total	₹ 12,323.30
		Total cost for 1 Kg.			₹ 103.56

			Say,	₹	103.60

- 9.28 Providing testing & tightening of high strength friction grip bolts (HSFG bolts) of class / grade EN 8 up to proof load as per IS 4000, including required threading, using automatic calibrated torque wrench at all locations & all heights and their compitable nuts & washers all complete required to execute the job. All HSFG bolts, nuts & washers confirming to IS 1367, IS 6610 & IS 4000 shall be used. The measurement shall be made for complete assembly of bolt, nut & compitable washers used in permanent works.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one bolt, nut and compitable washers	Kg.			
	a. Materials:				
09036	High strength friction grip bolts (HSFG bolts) of class / grade EN 8	Kg.	1.00	₹ 155.00	₹ 155.00
	b. Carriage:				
0427	Carriage of materials	Tonne	0.001	₹ 110.94	₹ 0.11
	c. Labours:				
0206	Blacksmith 1st class	day	0.050	₹ 425.00	₹ 21.25
	d. Water charges & electricity charges: @ 1.50% on total.	1.5%	on	₹ 176.36	₹ 2.65
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 179.01	₹ 5.37
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 184.38	₹ 27.66
	Cost of 1 kg			Total	₹ 212.04
		Total cost for 1 Kg.			₹ 212.04
				Say,	₹ 212.00

S U B - H E A D - 1 0



F L O O R I N G

**SUB HEAD : 10.0 / FLOORING
BASIC RATES**

Code No.	Description	Unit	Rate
0216	Foreman	Day	₹ 425.00
0205	Bhisti/ Waterman	Day	₹ 300.00
0210	Carpenter 2nd class	Day	₹ 380.00
0209	Carpenter 1st class	Day	₹ 425.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0221	Mason (for ornamental stone work) 1st class	Day	₹ 425.00
0224	Mate	Day	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	₹ 380.00
0218*	Mason (average)	Day	₹ 400.00
0207	Blaksmith 2nd class	Day	₹ 380.00
10001	25 mm thick pre-polished colored concrete designer tiles of size 300mm x 300mm (using 50% white cement and 50% ordinary cement)	Sqm	₹ 385.00
04002	Well burnt brick aggregate (Single size) : 20 mm nominal size	cum	₹ 2,975.00
04003	Well burnt brick aggregate (Single size) : 12 / 12.5mm nominal size	cum	₹ 3,075.00
04003	Well burnt brick aggregate (Single size) : 10 mm nominal size	cum	₹ 3,075.00
04006	Stone Aggregate (Single size) : 20 mm nominal size	cum	₹ 3,969.00
04007	Stone Aggregate (Single size) : 12 / 12.5 mm nominal size	cum	₹ 4,005.00
04008	Stone Aggregate (Single size) : 10 mm nominal size	cum	₹ 4,040.00
04009	Stone Aggregate (Single size) : 06 mm nominal size	cum	₹ 3,750.00
03001	Portland Cement	tonne	₹ 6,100.00
03002	White Cement	tonne	₹ 18,000.00
03004	Marble dust/ powder	cum	₹ 3,780.00
03006	Marble chips up to 4mm and downsize White & black	Kg	₹ 5.41
03003	Marble chips large size above 4 mm White & black	Kg	₹ 5.41
10007	Black colour dark shade pigment	Kg	₹ 85.00
10027	Red, chocolate, orange, buff or yellow (red oxide of iron) light shade pigment	Kg	₹ 85.00
10017	Green or blue medium shade pigment	Kg	₹ 85.00
02003	Fine sand (selected quarry)	cum	₹ 370.00

Code No.	Description	Unit	Rate
05056	Structural steel such as tees, angles channels and R.S. joists	quintal	₹ 4,267.00
05026	Flats up to 10 mm in thickness	quintal	₹ 3,992.00
10014	Glass strip 40 mm wide 4 mm thick	metre	₹ 22.00
10020	Kota stone slab 20 mm to 25 mm thick (semi-polished)	Sqm	₹ 335.00
08290	Second class teak wood in planks (local)	Cum	₹ 35,000.00
10024	Precast terrazzo tiles 22 mm thick (light shade)	sqm	₹ 290.00
09022	Welding by electric plant	cm	₹ 2.00
10013	Chequered terrazzo tiles 22 mm thick(light shade)	sqm	₹ 330.00
10012	Chequered tiles 18 mm thick (dark shade)	sqm	₹ 195.00
06001	Brick (1st class)	1000 Nos	₹ 8,027.00
10006	Aluminium Strip 40 mm wide and 2 mm thick	Kg	₹ 200.00
10002	8 mm thick marble tiles (polished) Raj Nagar	Sqm	₹ 435.00
10034	White marble slab Markana second quality plain veined 18 mm thick	Sqm	₹ 2,000.00
10023	Pink marble slab plain 18mm thick	Sqm	₹ 890.00
10028	Udaipur green marble slab plain 18mm thick	Sqm	₹ 875.00
10008	Black Zebra marble slab plain 18mm thick	Sqm	₹ 571.00
10004	Acid proof cement	tonne	₹ 9,000.00
07006	White marble Raj Nagar plain 18 mm thick (slab area 0.10 sqm to 0.50 sqm)	Sqm	₹ 850.00
10003	Acid and alkali resistant tiles 300x300 mm size, 10 mm thick	10 Nos.	₹ 594.00
10018	Hardening Compound	Kg	₹ 50.00
10011	Ceramic Glazed Tiles 1st quality minimum thickness 5mm in all colours shades and designs	Sqm	₹ 270.00
10010	Ceramic Glazed Tiles 1st quality 300 x 300mm in all shades and designs	Sqm	₹ 270.00
10009	Ceramic Glazed Tiles 1st quality 400 x 400mm in all shades and designs	Sqm	₹ 360.00
10026	Rectified Ceramic Glazed Tiles 1st quality 300x 300 or more in all shades designs White, Ivory, Grey, Fume Red Brown etc.	Sqm	₹ 400.00
10025	Rectified Ceramic Glazed Tiles 1st quality 300 x 300 or more in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	Sqm	₹ 470.00
10005	Agaria white marble slab plain 18 mm thick	Sqm	₹ 1,300.00
10030	Vitrified floor tile 50x50 cm conforming to IS: 15622 : 2006 Group (B 1 a)	Sqm	₹ 510.00
10031	Vitrified floor tile 60x60 cm conforming to IS: 15622 : 2006 Group (B 1 a)	Sqm	₹ 615.00
10032	Vitrified floor tile 80x80 cm conforming to IS: 15622 : 2006 Group (B 1 a)	Sqm	₹ 860.00

Code No.	Description	Unit	Rate
10029	Vitrified floor tile 100x100 cm conforming to IS: 15622 : 2006 Group (B 1 a)	Sqm	₹ 1,400.00
10019	High polymer modified quickset tile adhesive	Kg	₹ 12.00
10035	White marble slab Markana second quality plain veined 14 mm thick	Sqm	₹ 1,700.00
07013	White marble Raj Nagar plain 14 mm thick (slab area 0.10 sqm to 0.50 sqm)	Sqm	₹ 700.00
10041	Agaria white marble slab plain 14 mm thick	Sqm	₹ 1,000.00
10042	Black Zebra marble slab plain 14mm thick	Sqm	₹ 435.00
10043	Udaipur green marble slab plain 14mm thick	Sqm	₹ 750.00
10044	Pink marble slab plain 14mm thick	Sqm	₹ 795.00
05006	Bitumen penetration 80/25 (blown type) of approved quality	tonne	₹ 36,820.00
10045	Ceramic Glazed Tiles 1st quality 600 x 600mm in all shades and designs	Sqm	₹ 430.00
10046	Epoxy grout	kg	₹ 380.00
10047	Border tiles	each	₹ 17.00
10048	Ceramic Tiles Pieces for Crazy Flooring	quintal	₹ 140.00
10049	Synthetic polyester triangular fibre of length 12 mm, effective dia. 10-40 microns and specific gravity of 1.34 to 1.40	kg	₹ 375.00
10050	White marble rajnagar plain stone pieces for crazy flooring	quintal	₹ 160.00
10051	Tile fixing chemical adhesive	kg	₹ 22.00
10052	Glass mosaic tiles (20 mm x 20 mm x 4 mm)	sqm	₹ 1,185.00
10053	Cement polymer Grout Compound	kg	₹ 30.00
10054	Acid for cleaning tiles	litre	₹ 20.00
10055	500x500x40 mm thick Turf paver	sqm	₹ 580.00
10056	Bamboo wood Tile Flooring 14mm thick of minimum size 1800mm x 130mm	sqm	₹ 3,775.00
10057	Bamboo wood Quarter Round 18mm thick of size 1900mm x 18mm	metre	₹ 125.00
10058	Bamboo wood door reducer 14mm thick of size 1900mm x 44mm	metre	₹ 275.00
10059	Expanded poly ethylene Foam sheet 4mm thick of Density 40kg/m ³	sqm	₹ 18.00
10060	Silicon based Joint Sealant for Tiles	kg	₹ 150.00
10061	Rubber base Adhesive	kg	₹ 160.00
10062	Bamboo wood Skirting 14mm thick of Size 1900mm x 85mm	metre	₹ 325.00
10063	Bamboo wood Tile Wall Cladding 10mm thick of size 1900mm x 135mm	sqm	₹ 3,375.00
10064	Bamboo wood T-mold 14mm thick of size 1900mm x 44mm	metre	₹ 275.00
10065	Bamboo wood Threshold 14mm thick of size 1900mm x 44mm	metre	₹ 275.00

Code No.	Description	Unit	Rate
10066	Expanded poly ethylene Foam sheet 1mm thick of Density 40kg/m ³	sqm	₹ 8.50
08239	Stainless steel screws 50 mm	100 Nos.	₹ 275.00
08241	Stainless steel screws 30 mm	100 Nos.	₹ 208.00
10067	Laminated wooden plank for Flooring 8mm thick of minimum size 1202mm x 192mm : AC3 Grade	sqm	₹ 985.00
10068	Laminated wooden plank for Flooring 8mm thick of minimum size 1202mm x 192mm : AC4 Grade	sqm	₹ 1,200.00
10069	Laminated wood T-profile 15mm thick of size 2286mm x 45mm	metre	₹ 295.00
10070	Laminated wood door reducer 12mm thick of size 2286mm x 45mm	metre	₹ 295.00
10071	Laminated wooden Skirting 12mm thick of Size 2286mm x 60mm	metre	₹ 208.00
0406	Carriage: Bricks	1000 Nos	₹ 332.82
0405	Carriage: Brick/ Stone aggregate below 40 mm nominal size	cum	₹ 159.75
0473	Carriage: Timber	cum	₹ 80.65
0468	Carriage: Steel	tonne	₹ 110.94
0421	Carriage: Cement	tonne	₹ 110.94
0469	Carriage: Stone blocks white & red sand stone & kota stone slab	tonne	₹ 110.94
0425	Carriage: Fine Sand	cum	₹ 142.63
0431	Carriage: Marble dust and marble chips	cum	₹ 130.51
0472	Carriage: Tar bitumen	tonne	₹ 110.94

SUB HEAD : 10.0
FLOORING WORK

10.1	Providing and laying brick on edge flooring in cement mortar including cement slurry etc. complete.				
10.1.1	In cement mortar 1 : 4 (1 cement : 4 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
	Materials:-				
06001	Bricks	1000.00	500.00	₹ 8,027.00	₹ 4,013.50
0406	Carriage of bricks	1000.00	500.00	₹ 332.82	₹ 166.41
	Cement mortar 1:4	cum	0.434	₹ 3,184.67	₹ 1,382.15
	(Rate as per item No.3.4)				
03001	Cement for slurry	tonne	0.02	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.02	₹ 110.94	₹ 2.22
	Labour:-				
0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	0.98	₹ 300.00	₹ 294.00
0220	Mason 2nd class	Day	1.08	₹ 380.00	₹ 410.40
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Add for water charges	@	1.00%	₹ 6,774.68	₹ 67.75
	Add for sundries and contingencies	@	3.00%	₹ 6,842.43	₹ 205.27
	Add for contractor's profit and overheads	@	15.00%	₹ 7,047.70	₹ 1,057.16
	Cost of 10 sqm.				₹ 8,104.86
	Cost of 1 sqm.				₹ 810.49
	Say				₹ 810.50

10.1.2	In cement mortar 1 : 5 (1 cement : 5 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
	Materials:-				
06001	Bricks	1000.00	500.00	₹ 8,027.00	₹ 4,013.50
0406	Carriage of bricks	1000.00	500.00	₹ 332.82	₹ 166.41
	Cement mortar 1:5	cum	0.434	₹ 2,749.90	₹ 1,193.46
	(Rate as per item No.3.5)				
03001	Cement for slurry	tonne	0.02	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.02	₹ 110.94	₹ 2.22
	Labour:-				
0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	0.98	₹ 300.00	₹ 294.00
0220	Mason 2nd class	Day	1.08	₹ 380.00	₹ 410.40
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Add for water charges	@	1.00%	₹ 6,585.99	₹ 65.86
	Add for sundries and contingencies	@	3.00%	₹ 6,651.85	₹ 199.56
	Add for contractor's profit and overheads	@	15.00%	₹ 6,851.41	₹ 1,027.71
	Cost of 10 sqm.				₹ 7,879.12
	Cost of 1 sqm.				₹ 787.91
	Say				₹ 787.90

10.1.3	In cement mortar 1 : 6 (1 cement : 6 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
	Materials:-				
06001	Bricks	1000.00	500.00	₹ 8,027.00	₹ 4,013.50
0406	Carriage of bricks	1000.00	500.00	₹ 332.82	₹ 166.41
	Cement mortar 1:6	cum	0.434	₹ 2,377.25	₹ 1,031.73
	(Rate as per item No.3.6)				
03001	Cement for slurry	tonne	0.02	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.02	₹ 110.94	₹ 2.22
	Labour:-				
0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	0.98	₹ 300.00	₹ 294.00
0220	Mason 2nd class	Day	1.08	₹ 380.00	₹ 410.40
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00

	Add for water charges	@	1.00%	₹ 6,424.26	₹ 64.24
	Add for sundries and contingencies	@	3.00%	₹ 6,488.50	₹ 194.66
	Add for contractor's profit and overheads	@	15.00%	₹ 6,683.16	₹ 1,002.47
	Cost of 10 sqm.				₹ 7,685.63
	Cost of 1 sqm.				₹ 768.56
	Say				₹ 768.60

10.2	Providing and laying flat brick flooring in cement mortar including cement slurry etc. complete.				
10.2.1	In cement mortar 1 : 4 (1 cement : 4 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
	Materials:-				
06001	Bricks	1000.00	300.00	₹ 8,027.00	₹ 2,408.10
0406	Carriage of bricks	1000.00	300.00	₹ 332.82	₹ 99.85
	Cement mortar 1:4	cum	0.300	₹ 3,184.67	₹ 955.40
	(Rate as per item No.3.4)				
03001	Cement for slurry	tonne	0.02	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.02	₹ 110.94	₹ 2.22
	Labour:-				
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar	Day	0.83	₹ 300.00	₹ 249.00
0212	Coolie	Day	0.83	₹ 300.00	₹ 249.00
0220	Mason 2nd class	Day	0.85	₹ 380.00	₹ 323.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Add for water charges	@	1.00%	₹ 4,486.57	₹ 44.87
	Add for sundries and contingencies	@	3.00%	₹ 4,531.44	₹ 135.94
	Add for contractor's profit and overheads	@	15.00%	₹ 4,667.38	₹ 700.11
	Cost of 10 sqm.				₹ 5,367.49
	Cost of 1 sqm.				₹ 536.75
	Say				₹ 536.80

10.2.2	In cement mortar 1 : 5 (1 cement : 5 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
	Materials:-				
06001	Bricks	1000.00	300.00	₹ 8,027.00	₹ 2,408.10
0406	Carriage of bricks	1000.00	300.00	₹ 332.82	₹ 99.85
	Cement mortar 1:5	cum	0.300	₹ 2,749.90	₹ 824.97
	(Rate as per item No.3.5)				
03001	Cement for slurry	tonne	0.02	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.02	₹ 110.94	₹ 2.22
	Labour:-				
0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0220	Mason 2nd class	Day	1.10	₹ 380.00	₹ 418.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Add for water charges	@	1.00%	₹ 4,559.14	₹ 45.59
	Add for sundries and contingencies	@	3.00%	₹ 4,604.73	₹ 138.14
	Add for contractor's profit and overheads	@	15.00%	₹ 4,742.87	₹ 711.43
	Cost of 10 sqm.				₹ 5,454.30
	Cost of 1 sqm.				₹ 545.43
	Say				₹ 545.40

10.2.3	In cement mortar 1 : 6 (1 cement : 6 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
	Materials:-				
06001	Bricks	1000.00	300.00	₹ 8,027.00	₹ 2,408.10
0406	Carriage of bricks	1000.00	300.00	₹ 332.82	₹ 99.85
	Cement mortar 1:6	cum	0.300	₹ 2,377.25	₹ 713.18
	(Rate as per item No.3.6)				
03001	Cement for slurry	tonne	0.02	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.02	₹ 110.94	₹ 2.22
	Labour:-				

0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0220	Mason 2nd class	Day	1.10	₹ 380.00	₹ 418.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Add for water charges	@	1.00%	₹ 4,447.35	₹ 44.47
	Add for sundries and contingencies	@	3.00%	₹ 4,491.82	₹ 134.75
	Add for contractor's profit and overheads	@	15.00%	₹ 4,626.57	₹ 693.99
	Cost of 10 sqm.				₹ 5,320.56
	Cost of 1 sqm.				₹ 532.06
	Say				₹ 532.10

10.3	Providing and laying dry flat brick flooring in required pattern complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
	Materials:-				
06001	Bricks	1000.00	300.00	₹ 8,027.00	₹ 2,408.10
0406	Carriage of bricks	1000.00	300.00	₹ 332.82	₹ 99.85
02003	Fine Sand	cum	0.090	₹ 370.00	₹ 33.30
0425	Carriage of Sand	cum	0.090	₹ 142.63	₹ 12.84
	Labour:-				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0203	Beldar	Day	0.90	₹ 300.00	₹ 270.00
0212	Coolie	Day	0.90	₹ 300.00	₹ 270.00
0220	Mason 2nd class	Day	0.65	₹ 380.00	₹ 247.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Add for water charges	@	1.00%	₹ 3,386.09	₹ 33.86
	Add for sundries and contingencies	@	3.00%	₹ 3,419.95	₹ 102.60
	Add for contractor's profit and overheads	@	15.00%	₹ 3,522.55	₹ 528.38
	Cost of 10 sqm.				₹ 4,050.93
	Cost of 1 sqm.				₹ 405.09
	Say				₹ 405.10

10.4	Providing and laying dry brick on edge flooring in required pattern complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
	Materials:-				
06001	Bricks	1000.00	500.00	₹ 8,027.00	₹ 4,013.50
0406	Carriage of bricks	1000.00	500.00	₹ 332.82	₹ 166.41
02003	Fine Sand	cum	0.15	₹ 370.00	₹ 55.50
0425	Carriage of Sand	cum	0.15	₹ 142.63	₹ 21.39
	Labour:-				
0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0220	Mason 2nd class	Day	0.90	₹ 380.00	₹ 342.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Add for water charges	@	1.00%	₹ 5,249.80	₹ 52.50
	Add for sundries and contingencies	@	3.00%	₹ 5,302.30	₹ 159.07
	Add for contractor's profit and overheads	@	15.00%	₹ 5,461.37	₹ 819.21
	Cost of 10 sqm.				₹ 6,280.58
	Cost of 1 sqm.				₹ 628.06
	Say				₹ 628.10

10.5	Providing and laying cement concrete 1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size) flooring finished with a floating coat of neat cement including cement slurry, rounding of edges and strips and cost of glass strips etc. complete.				
10.5.1	40mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	Materials:-				
04006	20mm nominal size stone ballast	cum	0.267	₹ 3,969.00	₹ 1,059.72
04007	12.5 mm nominal size stone ballast	cum	0.089	₹ 4,005.00	₹ 356.45
0405	Carriage of stone ballast	cum	0.356	₹ 159.75	₹ 56.87
02003	Fine sand	cum	0.178	₹ 370.00	₹ 65.86
0425	Carriage of Fine sand	cum	0.178	₹ 142.63	₹ 25.39

03001	Cement for slurry	tonne	0.170	₹ 6,100.00	₹ 1,037.00
0421	Carriage of cement	tonne	0.170	₹ 110.94	₹ 18.86
10014	Glass strips 40x4 mm	metre	11.340	₹ 22.00	₹ 249.48
	Labour:-				
0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0203	Beldar	Day	0.95	₹ 300.00	₹ 285.00
0212	Coolie	Day	0.95	₹ 300.00	₹ 285.00
0219	Mason 1st class	Day	1.00	₹ 425.00	₹ 425.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump	@	2.00%	₹ 3,945.63	₹ 78.91
	Add for water charges	@	1.00%	₹ 4,024.54	₹ 40.25
	Add for sundries and contingencies in/c carriage of glass strips	@	3.00%	₹ 4,064.79	₹ 121.94
	Add for contractor's profit and overheads	@	15.00%	₹ 4,186.73	₹ 628.01
	Cost of 10 sqm.				₹ 4,814.74
	Cost of 1 sqm.				₹ 481.47
	Say				₹ 481.50

10.6	Providing and laying cement concrete 1:2:4 (1 cement: 2 fine sand : 4 graded well burnt brick aggregate) flooring finished with a floating coat of neat cement including cement slurry, rounding of edges and strips and cost of glass strips etc. complete.				
10.6.1	40mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	Materials:-				
04002	20mm nominal size well burnt brick aggregate	cum	0.267	₹ 2,975.00	₹ 794.33
04003	12.5mm nominal size well burnt brick aggregate	cum	0.089	₹ 3,075.00	₹ 273.68
0405	Carriage of brick aggregate	cum	0.356	₹ 159.75	₹ 56.87
02003	Fine sand	cum	0.178	₹ 370.00	₹ 65.86
0425	Carriage of Fine sand	cum	0.178	₹ 142.63	₹ 25.39
03001	Cement for slurry	tonne	0.170	₹ 6,100.00	₹ 1,037.00
0421	Carriage of cement	tonne	0.170	₹ 110.94	₹ 18.86
10014	Glass strips 40X4 mm	metre	11.340	₹ 22.00	₹ 249.48
	Labour:-				
0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0203	Beldar	Day	0.95	₹ 300.00	₹ 285.00
0212	Coolie	Day	0.95	₹ 300.00	₹ 285.00
0219	Mason 1st class	Day	1.00	₹ 425.00	₹ 425.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump	@	2.00%	₹ 3,597.47	₹ 71.95
	Add for water charges	@	1.00%	₹ 3,669.42	₹ 36.69
	Add for sundries and contingencies in/c carriage of glass strips	@	3.00%	₹ 3,706.11	₹ 111.18
	Add for contractor's profit and overheads	@	15%	₹ 3,817.29	₹ 572.59
	Cost of 10 sqm.				₹ 4,389.88
	Cost of 1 sqm.				₹ 438.99
	Say				₹ 439.00

10.7	Extra for making chequers of approved pattern in Cement Concrete floors, steps, landing, pavements etc. complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	Labour:-				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
0220	Mason 2nd class	Day	0.40	₹ 380.00	₹ 152.00
	Machineries:-				
	Add for sundries and contingencies	@	3.00%	₹ 281.00	₹ 8.43
	Add for contractor's profit and overheads	@	15.00%	₹ 289.43	₹ 43.41
	Cost of 10 sqm.				₹ 332.84
	Cost of 1 sqm.				₹ 33.28
	Say				₹ 33.30

10.8	Providing and laying cement concrete 1:2:4 (1 cement : 2 fine sand : 4 graded stone aggregate) flooring finished with a floating coat of neat cement including cement slurry, rounding of edges and strips etc. complete.				
10.8.1	25 mm thick with 12.5 mm stone aggregate				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	Materials:-				
04007	Stone aggregate 12.5 mm	cum	0.176	₹ 4,005.00	₹ 704.88
04008	Stone aggregate 10 mm	cum	0.059	₹ 4,040.00	₹ 238.36
04006	Carriage of stone aggregate	cum	0.235	₹ 159.75	₹ 37.54
02003	Fine sand	cum	0.118	₹ 370.00	₹ 43.66
0425	Carriage of Fine sand	cum	0.118	₹ 142.63	₹ 16.83
03001	Cement	tonne	0.122	₹ 6,100.00	₹ 744.20
0421	Carriage of cement	tonne	0.122	₹ 110.94	₹ 13.53
	Labour:-				
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar	Day	0.90	₹ 300.00	₹ 270.00
0212	Coolie	Day	0.90	₹ 300.00	₹ 270.00
0219	Mason 1st class	Day	0.90	₹ 425.00	₹ 382.50
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump etc.	@	2.00%	₹ 2,799.50	₹ 55.99
	Add for cost of formwork to lay concrete in alternate panels & cost of brushes etc.	@	2.00%	₹ 2,855.49	₹ 57.11
	Add for water charges	@	1.00%	₹ 2,912.60	₹ 29.13
	Add for sundries and contingencies	@	3.00%	₹ 2,941.73	₹ 88.25
	Add for contractor's profit and overheads	@	15.00%	₹ 3,029.98	₹ 454.50
	Cost of 10 sqm.				₹ 3,484.48
	Cost of 1 sqm.				₹ 348.45
	Say				₹ 348.50

10.8.2	40 mm thick with 20 mm stone aggregate				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	Materials:-				
04006	Stone aggregate 20 mm	cum	0.282	₹ 3,969.00	₹ 1,119.26
04007	Stone aggregate 12.5 mm	cum	0.094	₹ 4,005.00	₹ 376.47
04006	Carriage of stone aggregate	cum	0.376	₹ 159.75	₹ 60.07
02003	Fine sand	cum	0.188	₹ 370.00	₹ 69.56
0425	Carriage of Fine sand	cum	0.188	₹ 142.63	₹ 26.81
03001	Cement for slurry	tonne	0.170	₹ 6,100.00	₹ 1,037.00
0421	Carriage of cement	tonne	0.170	₹ 110.94	₹ 18.86
	Labour:-				
0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0203	Beldar	Day	0.95	₹ 300.00	₹ 285.00
0212	Coolie	Day	0.95	₹ 300.00	₹ 285.00
0219	Mason 1st class	Day	0.95	₹ 425.00	₹ 403.75
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump	@	2.00%	₹ 3,762.78	₹ 75.26
	Add for cost of formwork to lay concrete in alternate panels & cost of brushes etc.	@	2.00%	₹ 3,838.04	₹ 76.76
	Add for water charges	@	1.00%	₹ 3,914.80	₹ 39.15
	Add for sundries and contingencies	@	3.00%	₹ 3,953.95	₹ 118.62
	Add for contractor's profit and overheads	@	15.00%	₹ 4,072.57	₹ 610.89
	Cost of 10 sqm.				₹ 4,683.46
	Cost of 1 sqm.				₹ 468.35
	Say				₹ 468.40

10.9	Providing and laying cement concrete 1:2:4 (1 cement : 2 fine sand : 4 graded well burnt brick aggregate) flooring finished with a floating coat of neat cement including cement slurry, rounding of edges and strips etc. complete.				
10.9.1	25 mm thick with 12.5 mm well burnt brick aggregate				
Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 10 sqm.	Sqm.			
	Materials:-				
04003	12.5 mm nominal size well burnt brick aggregate	cum	0.176	₹ 3,075.00	₹ 541.20
04003	10 mm nominal size well burnt brick aggregate	cum	0.059	₹ 3,075.00	₹ 181.43
0405	Carriage of brick aggregate	cum	0.235	₹ 159.75	₹ 37.54
02003	Fine sand	cum	0.118	₹ 370.00	₹ 43.66
0425	Carriage of Fine sand	cum	0.118	₹ 142.63	₹ 16.83
03001	Cement for slurry	tonne	0.122	₹ 6,100.00	₹ 744.20
0421	Carriage of cement	tonne	0.122	₹ 110.94	₹ 13.53
	Labour:-				
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0203	Beldar	Day	0.90	₹ 300.00	₹ 270.00
0212	Coolie	Day	0.90	₹ 300.00	₹ 270.00
0219	Mason 1st class	Day	0.90	₹ 425.00	₹ 382.50
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump	@	2.00%	₹ 2,578.89	₹ 51.58
	Add for cost of formwork to lay concrete in alternate panels & cost of brushes etc.	@	2.00%	₹ 2,630.47	₹ 52.61
	Add for water charges	@	1.00%	₹ 2,683.08	₹ 26.83
	Add for sundries and contingencies	@	3.00%	₹ 2,709.91	₹ 81.30
	Add for contractor's profit and overheads	@	15.00%	₹ 2,791.21	₹ 418.68
	Cost of 10 sqm.				₹ 3,209.89
	Cost of 1 sqm.				₹ 320.99
	Say				₹ 321.00

10.9.2	40 mm thick with 20 mm well burnt brick aggregate				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	Materials:-				
04002	20 mm nominal size well burnt brick aggregate	cum	0.282	₹ 2,975.00	₹ 838.95
04003	12.5 mm nominal size well burnt brick aggregate	cum	0.094	₹ 3,075.00	₹ 289.05
0405	Carriage of brick aggregate	cum	0.376	₹ 159.75	₹ 60.07
02003	Fine sand	cum	0.188	₹ 370.00	₹ 69.56
0425	Carriage of Fine sand	cum	0.188	₹ 142.63	₹ 26.81
03001	Cement for slurry	cum	0.170	₹ 6,100.00	₹ 1,037.00
0421	Carriage of cement	cum	0.170	₹ 110.94	₹ 18.86
	Labour:-				
0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0203	Beldar	Day	0.95	₹ 300.00	₹ 285.00
0212	Coolie	Day	0.95	₹ 300.00	₹ 285.00
0219	Mason 1st class	Day	0.95	₹ 425.00	₹ 403.75
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump	@	2.00%	₹ 3,395.05	₹ 67.90
	Add for cost of formwork to lay concrete in alternate panels & cost of brushes etc.	@	2.00%	₹ 3,462.95	₹ 69.26
	Add for water charges	@	1.00%	₹ 3,532.21	₹ 35.32
	Add for sundries and contingencies	@	3.00%	₹ 3,567.53	₹ 107.03
	Add for contractor's profit and overheads	@	15.00%	₹ 3,674.56	₹ 551.18
	Cost of 10 sqm.				₹ 4,225.74
	Cost of 1 sqm.				₹ 422.57
	Say				₹ 422.60

10.10	Providing and laying 52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 fine sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm metallic concrete hardener consisting of mix 1 : 2 (1 cement hardener mix : 2 stone aggregate 6 mm nominal size) by volume with hardening compound @ 2 litre per 50 kg of cement including cement slurry, nosing of steps etc. complete.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.				
a.	Materials:-				
04006	Stone aggregate 20 mm	cum	0.282	₹ 3,969.00	₹ 1,119.26

04007	Stone aggregate 12.5 mm	cum	0.094	₹ 4,005.00	₹ 376.47
04009	Stone aggregate 6 mm	cum	0.1128	₹ 3,750.00	₹ 423.00
0405	Carriage of stone ballast	cum	0.4888	₹ 159.75	₹ 78.09
02003	Fine sand	cum	0.188	₹ 370.00	₹ 69.56
0425	Carriage of Fine sand	cum	0.188	₹ 142.63	₹ 26.81
03001	Cement for concreting	tonne	0.128	₹ 6,100.00	₹ 780.80
03001	Cement for top layer	tonne	0.083	₹ 6,100.00	₹ 506.30
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.231	₹ 110.94	₹ 25.63
10018	Metallic floor hardener	litre	2.44	₹ 50.00	₹ 122.00
b.	Labour:-				
0224	Mate	Day	0.19	₹ 300.00	₹ 57.00
0219	Mason 1st class	Day	1.50	₹ 425.00	₹ 637.50
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
c.	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump etc., maintenance of mixer, pumps for water & carriage of Metallic floor hardener etc.	@	2.50%	₹ 5,289.42	₹ 132.24
	Add for form-work to lay concrete in alternate panels and cost of brushes etc.	@	2.00%	₹ 5,421.66	₹ 108.43
	Add for water charges	@	1.00%	₹ 5,530.09	₹ 55.30
	Add for sundries and contingencies	@	3.00%	₹ 5,585.39	₹ 167.56
	Add for contractor's profit and overheads	@	15.00%	₹ 5,752.95	₹ 862.94
	Cost of 10 sqm.				₹ 6,615.89
	Cost of 1 sqm.				₹ 661.59
	Say				₹ 661.60

10.11	Providing and laying 62 mm thick cement concrete flooring with concrete hardener topping under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 fine sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm metallic concrete hardener consisting of mix 1 : 2 (1 cement hardener mix : 2 stone aggregate 6 mm nominal size) by volume with hardening compound @ 2 litre per 50 kg of cement including cement slurry, nosing of steps etc. complete

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.				
a.	Materials:-				
04006	Stone aggregate 20 mm	cum	0.3525	₹ 3,969.00	₹ 1,399.07
04007	Stone aggregate 12.5 mm	cum	0.1175	₹ 4,005.00	₹ 470.59
04009	Stone aggregate 6 mm	cum	0.1128	₹ 3,750.00	₹ 423.00
0405	Carriage of stone ballast	cum	0.5828	₹ 159.75	₹ 93.10
02003	Fine sand	cum	0.235	₹ 370.00	₹ 86.95
0425	Carriage of Fine sand	cum	0.235	₹ 142.63	₹ 33.52
03001	Cement for concreting	tonne	0.160	₹ 6,100.00	₹ 976.00
03001	Cement for top layer	tonne	0.083	₹ 6,100.00	₹ 506.30
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.263	₹ 110.94	₹ 29.18
10018	Metallic floor hardener	litre	2.44	₹ 50.00	₹ 122.00
b.	Labour:-				
0224	Mate	Day	0.19	₹ 300.00	₹ 57.00
0219	Mason 1st class	Day	1.50	₹ 425.00	₹ 637.50
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
c.	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump, maintenance of mixer, pumps for water & carriage of Metallic floor hardener etc.	@	2.50%	₹ 5,901.21	₹ 147.53
	Add for form-work to lay concrete in alternate panels and cost of brushes etc.	@	2.00%	₹ 6,048.74	₹ 120.97
	Add for water charges	@	1.00%	₹ 6,169.71	₹ 61.70
	Add for sundries and contingencies	@	3.00%	₹ 6,231.41	₹ 186.94
	Add for contractor's profit and overheads	@	15.00%	₹ 6,418.35	₹ 962.75
	Cost of 10 Sqm.				₹ 7,381.10

	Cost of 1 Sqm.				₹ 738.11
	Say				₹ 738.10

10.12	Providing and laying cement concrete pavement including finishing etc. complete				

10.12.1	with 1:2:4 (1 cement : 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.875 Cum.	cum			
a.	Materials:-				
04006	Stone aggregate 20 mm	cum	1.3219	₹ 3,969.00	₹ 5,246.62
04007	Stone aggregate 12.5 mm	cum	0.4406	₹ 4,005.00	₹ 1,764.60
04006	Carriage of stone aggregate	cum	1.7625	₹ 159.75	₹ 281.56
02003	Fine sand	cum	0.881	₹ 370.00	₹ 325.97
0425	Carriage of Fine sand	cum	0.881	₹ 142.63	₹ 125.66
03001	Cement	tonne	0.600	₹ 6,100.00	₹ 3,660.00
0421	Carriage of cement	tonne	0.600	₹ 110.94	₹ 66.56
b.	Labour:-				
0224	Mate	Day	0.19	₹ 300.00	₹ 57.00
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0219	Mason 1st class	Day	1.50	₹ 425.00	₹ 637.50
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
c.	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump etc.	@	2.00%	₹ 13,110.47	₹ 262.21
	Add for form-work to lay concrete, cleaning of surface etc.	@	10.00%	₹ 13,372.68	₹ 1,337.27
	Add for water charges	@	1.00%	₹ 14,709.95	₹ 147.10
	Add for sundries and contingencies	@	3.00%	₹ 14,857.05	₹ 445.71
	Add for contractor's profit and overheads	@	15.00%	₹ 15,302.76	₹ 2,295.41
	Cost of 1.875 Cum.				₹ 17,598.17
	Cost of 1 Cum.				₹ 9,385.69
	Say				₹ 9,385.70

10.12.2	with 1:2:4 (1 cement : 2 fine sand : 4 graded well burnt brick aggregate 20 mm nominal size)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.875 Cum.	cum			
a.	Materials:-				
04002	20 mm nominal size well burnt brick aggregate	cum	1.3219	₹ 2,975.00	₹ 3,932.65
04003	12.5 mm nominal size well burnt brick aggregate	cum	0.4406	₹ 3,075.00	₹ 1,354.85
0405	Carriage of brick aggregate	cum	1.7625	₹ 159.75	₹ 281.56
02003	Fine sand	cum	0.881	₹ 370.00	₹ 325.97
0425	Carriage of Fine sand	cum	0.881	₹ 142.63	₹ 125.66
03001	Cement	tonne	0.600	₹ 6,100.00	₹ 3,660.00
0421	Carriage of cement	tonne	0.600	₹ 110.94	₹ 66.56
b.	Labour:-				
0224	Mate	Day	0.19	₹ 300.00	₹ 57.00
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0219	Mason 1st class	Day	1.50	₹ 425.00	₹ 637.50
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
c.	Machineries:-				
	Add for hire & running charges of concrete mixer, water pump etc.	@	2.00%	₹ 11,386.75	₹ 227.74
	Add for form-work to lay concrete, cleaning of surface	@	10.00%	₹ 11,614.49	₹ 1,161.45
	Add for water charges	@	1.00%	₹ 12,775.94	₹ 127.76
	Add for sundries and contingencies	@	3.00%	₹ 12,903.70	₹ 387.11
	Add for contractor's profit and overheads	@	15.00%	₹ 13,290.81	₹ 1,993.62
	Cost of 1.875 Cum.				₹ 15,284.43
	Cost of 1 Cum.				₹ 8,151.70
	Say				₹ 8,151.70

10.13	Providing and laying cement plaster skirting upto 300 mm height with cement mortar 1 : 3 (1 cement : 3 fine sand) finished with a floating coat of neat cement including rounding of junctions etc. complete.				

10.13.1	18 mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
a.	Materials:-				
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	cum	0.236	₹ 3,992.09	₹ 942.13
03001	Cement for finishing coat	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
b.	Labour:-				
0224	Mate	Day	0.11	₹ 300.00	₹ 33.00
0218*	Mason (average)	Day	1.35	₹ 400.00	₹ 540.00
0203	Beldar	Day	1.35	₹ 300.00	₹ 405.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
c.	Machineries:-				
	Add for water charges	@	1.00%	₹ 2,089.35	₹ 20.89
	Add for sundries and contingencies	@	3.00%	₹ 2,110.24	₹ 63.31
	Add for contractor's profit and overheads	@	15.00%	₹ 2,173.55	₹ 326.03
	Cost of 10 sqm.				₹ 2,499.58
	Cost of 1 Sqm.				₹ 249.96
	Say				₹ 250.00

10.13.2	21 mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
a.	Materials:-				
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	cum	0.270	₹ 3,992.09	₹ 1,077.86
03001	Cement for finishing coat	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
b.	Labour:-				
0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0218*	Mason (average)	Day	1.55	₹ 400.00	₹ 620.00
0203	Beldar	Day	1.55	₹ 300.00	₹ 465.00
0205	Bhisti/ Waterman	Day	0.17	₹ 300.00	₹ 51.00
c.	Machineries:-				
	Add for water charges	@	1.00%	₹ 2,377.08	₹ 23.77
	Add for sundries and contingencies	@	3.00%	₹ 2,400.85	₹ 72.03
	Add for contractor's profit and overheads	@	15.00%	₹ 2,472.88	₹ 370.93
	Cost of 10 sqm.				₹ 2,843.81
	Cost of 1 Sqm.				₹ 284.38
	Say				₹ 284.40

10.14	Providing and laying 40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1 : 2 : 4 (1 ordinary cement : 2 fine sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6 mm thick with white, black, chocolate, grey, yellow, pink, blue or green marble chips of sizes from 1 mm to 4 mm nominal size laid in cement marble powder mix 3 : 1 (3 cement : 1 marble powder) by weight in proportion of 4 : 7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc. complete.

10.14.1	Using dark shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04007	Stone aggregate 12.5 mm	cum	0.240	₹ 4,005.00	₹ 961.20
04008	Stone aggregate 10 mm	cum	0.080	₹ 4,040.00	₹ 323.20
04006	Carriage of stone aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46

0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10007	Dark shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,083.54	₹ 101.67
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,185.21	₹ 414.82
	Add for water charges	@	1.00%	₹ 5,600.03	₹ 56.00
	Add for sundries and contingencies	@	3.00%	₹ 5,656.03	₹ 169.68
	Add for contractor's profit and overheads	@	15.00%	₹ 5,825.71	₹ 873.86
	Cost of 10 sqm.				₹ 6,699.57
	Cost of 1 Sqm.				₹ 669.96
	Say				₹ 670.00

10.14.2	Using light shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04007	Stone aggregate 12.5 mm	cum	0.240	₹ 4,005.00	₹ 961.20
04008	Stone aggregate 10 mm	cum	0.080	₹ 4,040.00	₹ 323.20
04006	Carriage of stone aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,083.54	₹ 101.67
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,185.21	₹ 414.82
	Add for water charges	@	1.00%	₹ 5,600.03	₹ 56.00
	Add for sundries and contingencies	@	3.00%	₹ 5,656.03	₹ 169.68
	Add for contractor's profit and overheads	@	15.00%	₹ 5,825.71	₹ 873.86
	Cost of 10 sqm.				₹ 6,699.57
	Cost of 1 Sqm.				₹ 669.96
	Say				₹ 670.00

10.14.3	Using ordinary cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04007	Stone aggregate 12.5 mm	cum	0.240	₹ 4,005.00	₹ 961.20

04008	Stone aggregate 10 mm	cum	0.080	₹ 4,040.00	₹ 323.20
04006	Carriage of stone aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
6100	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone etc.	@	2.00%	₹ 4,839.59	₹ 96.79
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 4,936.38	₹ 394.91
	Add for water charges	@	1.00%	₹ 5,331.29	₹ 53.31
	Add for sundries and contingencies	@	3.00%	₹ 5,384.60	₹ 161.54
	Add for contractor's profit and overheads	@	15.00%	₹ 5,546.14	₹ 831.92
	Cost of 10 sqm.				₹ 6,378.06
	Cost of 1 Sqm.				₹ 637.81
	Say				₹ 637.80

10.14.4	Using medium shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04007	Stone aggregate 12.5 mm	cum	0.240	₹ 4,005.00	₹ 961.20
04008	Stone aggregate 10 mm	cum	0.080	₹ 4,040.00	₹ 323.20
04006	Carriage of stone aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10017	Medium shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,571.44	₹ 111.43
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,682.87	₹ 454.63
	Add for water charges	@	1.00%	₹ 6,137.50	₹ 61.38
	Add for sundries and contingencies	@	3.00%	₹ 6,198.88	₹ 185.97

	Add for contractor's profit and overheads	@	15.00%	₹ 6,384.85	₹ 957.73
	Cost of 10 sqm.				₹ 7,342.58
	Cost of 1 Sqm.				₹ 734.26
	Say				₹ 734.30

10.14.5	Using light shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04007	Stone aggregate 12.5 mm	cum	0.240	₹ 4,005.00	₹ 961.20
04008	Stone aggregate 10 mm	cum	0.080	₹ 4,040.00	₹ 323.20
04006	Carriage of stone aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,571.44	₹ 111.43
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,682.87	₹ 454.63
	Add for water charges	@	1.00%	₹ 6,137.50	₹ 61.38
	Add for sundries and contingencies	@	3.00%	₹ 6,198.88	₹ 185.97
	Add for contractor's profit and overheads	@	15.00%	₹ 6,384.85	₹ 957.73
	Cost of 10 sqm.				₹ 7,342.58
	Cost of 1 Sqm.				₹ 734.26
	Say				₹ 734.30

10.14.6	Using white cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04007	Stone aggregate 12.5 mm	cum	0.240	₹ 4,005.00	₹ 961.20
04008	Stone aggregate 10 mm	cum	0.080	₹ 4,040.00	₹ 323.20
04006	Carriage of stone aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00

0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone etc.	@	2.00%	₹ 5,327.49	₹ 106.55
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,434.04	₹ 434.72
	Add for water charges	@	1.00%	₹ 5,868.76	₹ 58.69
	Add for sundries and contingencies	@	3.00%	₹ 5,927.45	₹ 177.82
	Add for contractor's profit and overheads	@	15.00%	₹ 6,105.27	₹ 915.79
	Cost of 10 sqm.				₹ 7,021.06
	Cost of 1 Sqm.				₹ 702.11
	Say				₹ 702.10

10.15	Providing and laying 40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1 : 2 : 4 (1 ordinary cement : 2 fine sand : 4 graded well burnt brick aggregate 12.5 mm nominal size) and top layer 6 mm thick with white, black, chocolate, grey, yellow, pink, blue or green marble chips of sizes from 1 mm to 4 mm nominal size laid in cement marble powder mix 3 : 1 (3 cement : 1 marble powder) by weight in proportion of 4 : 7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc. complete.

10.15.1	Using dark shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04003	12.5 mm nominal size well burnt brick aggregate	cum	0.240	₹ 3,075.00	₹ 738.00
04003	10 mm nominal size well burnt brick aggregate	cum	0.080	₹ 3,075.00	₹ 246.00
0405	Carriage of Well burnt brick aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10007	Dark shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 4,783.14	₹ 95.66
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 4,878.80	₹ 390.30
	Add for water charges	@	1.00%	₹ 5,269.10	₹ 52.69
	Add for sundries and contingencies	@	3.00%	₹ 5,321.79	₹ 159.65
	Add for contractor's profit and overheads	@	15.00%	₹ 5,481.44	₹ 822.22
	Cost of 10 sqm.				₹ 6,303.66
	Cost of 1 Sqm.				₹ 630.37
	Say				₹ 630.40

10.15.2	Using light shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount

	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.240	₹ 3,075.00	₹ 738.00
04003	Well burnt brick aggregate 10 mm	cum	0.080	₹ 3,075.00	₹ 246.00
0405	Carriage of Well burnt brick aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 4,783.14	₹ 95.66
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 4,878.80	₹ 390.30
	Add for water charges	@	1.00%	₹ 5,269.10	₹ 52.69
	Add for sundries and contingencies	@	3.00%	₹ 5,321.79	₹ 159.65
	Add for contractor's profit and overheads	@	15.00%	₹ 5,481.44	₹ 822.22
	Cost of 10 sqm.				₹ 6,303.66
	Cost of 1 Sqm.				₹ 630.37
	Say				₹ 630.40

10.15.3	Using ordinary cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.240	₹ 3,075.00	₹ 738.00
04003	Well burnt brick aggregate 10 mm	cum	0.080	₹ 3,075.00	₹ 246.00
0405	Carriage of Well burnt brick aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone	@	2.00%	₹ 4,539.19	₹ 90.78

	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 4,629.97	₹ 370.40
	Add for water charges	@	1.00%	₹ 5,000.37	₹ 50.00
	Add for sundries and contingencies	@	3.00%	₹ 5,050.37	₹ 151.51
	Add for contractor's profit and overheads	@	15.00%	₹ 5,201.88	₹ 780.28
	Cost of 10 sqm.				₹ 5,982.16
	Cost of 1 Sqm.				₹ 598.22
	Say				₹ 598.20

10.15.4	Using medium shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.240	₹ 3,075.00	₹ 738.00
04003	Well burnt brick aggregate 10 mm	cum	0.080	₹ 3,075.00	₹ 246.00
0405	Carriage of Well burnt brick aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10017	Medium shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,271.04	₹ 105.42
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,376.46	₹ 430.12
	Add for water charges	@	1.00%	₹ 5,806.58	₹ 58.07
	Add for sundries and contingencies	@	3.00%	₹ 5,864.65	₹ 175.94
	Add for contractor's profit and overheads	@	15.00%	₹ 6,040.59	₹ 906.09
	Cost of 10 sqm.				₹ 6,946.68
	Cost of 1 Sqm.				₹ 694.67
	Say				₹ 694.70

10.15.5	Using light shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.240	₹ 3,075.00	₹ 738.00
04003	Well burnt brick aggregate 10 mm	cum	0.080	₹ 3,075.00	₹ 246.00
0405	Carriage of Well burnt brick aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00

0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,271.04	₹ 105.42
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,376.46	₹ 430.12
	Add for water charges	@	1.00%	₹ 5,806.58	₹ 58.07
	Add for sundries and contingencies	@	3.00%	₹ 5,864.65	₹ 175.94
	Add for contractor's profit and overheads	@	15.00%	₹ 6,040.59	₹ 906.09
	Cost of 10 sqm.				₹ 6,946.68
	Cost of 1 Sqm.				₹ 694.67
	Say				₹ 694.70

10.15.6	Using white cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 34mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.240	₹ 3,075.00	₹ 738.00
04003	Well burnt brick aggregate 10 mm	cum	0.080	₹ 3,075.00	₹ 246.00
0405	Carriage of Well burnt brick aggregate	cum	0.320	₹ 159.75	₹ 51.12
02003	Fine sand	cum	0.160	₹ 370.00	₹ 59.20
0425	Carriage of Fine sand	cum	0.160	₹ 142.63	₹ 22.82
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.109	₹ 6,100.00	₹ 664.90
0421	Carriage of cement	tonne	0.129	₹ 110.94	₹ 14.31
b)	For top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.000	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
	Labour:-				
0224	Mate	Day	0.22	₹ 300.00	₹ 66.00
0218*	Mason (average)	Day	1.50	₹ 400.00	₹ 600.00
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone etc.	@	2.00%	₹ 5,027.09	₹ 100.54
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,127.63	₹ 410.21
	Add for water charges	@	1.00%	₹ 5,537.84	₹ 55.38
	Add for sundries and contingencies	@	3.00%	₹ 5,593.22	₹ 167.80
	Add for contractor's profit and overheads	@	15.00%	₹ 5,761.02	₹ 864.15
	Cost of 10 sqm.				₹ 6,625.17
	Cost of 1 Sqm.				₹ 662.52
	Say				₹ 662.50

10.16	Providing and laying 40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 28 mm thick cement concrete 1 : 2 : 4 (1 ordinary cement : 2 fine sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12 mm thick with white, black, chocolate, grey, yellow, pink, blue or green marble chips of sizes from 7 mm to 10 mm nominal size laid in cement marble powder mix 3 : 1 (3 cement : 1 marble powder) by weight in proportion of 2 : 3 (2 cement marble powder mix : 3 marble chips) by volume including cement slurry etc. complete.

10.16.1	Using dark shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04007	Stone aggregate 12.5 mm	cum	0.197	₹ 4,005.00	₹ 788.99
04008	Stone aggregate 10 mm	cum	0.066	₹ 4,040.00	₹ 266.64
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03001	Cement	tonne	0.082	₹ 6,100.00	₹ 500.20
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
10007	Dark shade pigment @ 3.5Kg per 50Kg of cement = (3.50x82)/50 = 5.74Kg.	kg.	5.740	₹ 85.00	₹ 487.90
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,808.59	₹ 116.17
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,924.76	₹ 473.98
	Add for water charges	@	1.00%	₹ 6,398.74	₹ 63.99
	Add for sundries and contingencies	@	3.00%	₹ 6,462.73	₹ 193.88
	Add for contractor's profit and overheads	@	15.00%	₹ 6,656.61	₹ 998.49
	Cost of 10 sqm.				₹ 7,655.10
	Cost of 1 Sqm.				₹ 765.51
	Say				₹ 765.50

10.16.2	Using light shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04007	Stone aggregate 12.5 mm	cum	0.197	₹ 4,005.00	₹ 788.99
04008	Stone aggregate 10 mm	cum	0.066	₹ 4,040.00	₹ 266.64
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03001	Cement	tonne	0.082	₹ 6,100.00	₹ 500.20
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26

0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x82)/50 = 5.74Kg.	cum	5.740	₹ 85.00	₹ 487.90
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,808.59	₹ 116.17
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,924.76	₹ 473.98
	Add for water charges	@	1.00%	₹ 6,398.74	₹ 63.99
	Add for sundries and contingencies	@	3.00%	₹ 6,462.73	₹ 193.88
	Add for contractor's profit and overheads	@	15.00%	₹ 6,656.61	₹ 998.49
	Cost of 10 sqm.				₹ 7,655.10
	Cost of 1 Sqm.				₹ 765.51
	Say				₹ 765.50

10.16.3 Using ordinary cement in top layer with no pigment					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04007	Stone aggregate 12.5 mm	cum	0.197	₹ 4,005.00	₹ 788.99
04008	Stone aggregate 10 mm	cum	0.066	₹ 4,040.00	₹ 266.64
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03001	Cement	tonne	0.082	₹ 6,100.00	₹ 500.20
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone etc.	@	2.00%	₹ 5,320.69	₹ 106.41
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,427.10	₹ 434.17
	Add for water charges	@	1.00%	₹ 5,861.27	₹ 58.61
	Add for sundries and contingencies	@	3.00%	₹ 5,919.88	₹ 177.60
	Add for contractor's profit and overheads	@	15.00%	₹ 6,097.48	₹ 914.62
	Cost of 10 sqm.				₹ 7,012.10
	Cost of 1 Sqm.				₹ 701.21
	Say				₹ 701.20

10.16.4 Using medium shade pigment with white cement in top layer					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04007	Stone aggregate 12.5 mm	cum	0.197	₹ 4,005.00	₹ 788.99
04008	Stone aggregate 10 mm	cum	0.066	₹ 4,040.00	₹ 266.64

04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03002	White Cement	tonne	0.082	₹ 18,000.00	₹ 1,476.00
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
10017	Medium shade pigment @ 3.5Kg per 50Kg of cement = (3.50x82)/50 = 5.74Kg.	cum	5.740	₹ 85.00	₹ 487.90
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 6,784.39	₹ 135.69
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 6,920.08	₹ 553.61
	Add for water charges	@	1.00%	₹ 7,473.69	₹ 74.74
	Add for sundries and contingencies	@	3.00%	₹ 7,548.43	₹ 226.45
	Add for contractor's profit and overheads	@	15.00%	₹ 7,774.88	₹ 1,166.23
	Cost of 10 sqm.				₹ 8,941.11
	Cost of 1 Sqm.				₹ 894.11
	Say				₹ 894.10

10.16.5	Using light shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04007	Stone aggregate 12.5 mm	cum	0.197	₹ 4,005.00	₹ 788.99
04008	Stone aggregate 10 mm	cum	0.066	₹ 4,040.00	₹ 266.64
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03002	White Cement	tonne	0.082	₹ 18,000.00	₹ 1,476.00
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x82)/50 = 5.74Kg.	cum	5.740	₹ 85.00	₹ 487.90
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 6,784.39	₹ 135.69
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 6,920.08	₹ 553.61

	Add for water charges	@	1.00%	₹ 7,473.69	₹ 74.74
	Add for sundries and contingencies	@	3.00%	₹ 7,548.43	₹ 226.45
	Add for contractor's profit and overheads	@	15.00%	₹ 7,774.88	₹ 1,166.23
	Cost of 10 sqm.				₹ 8,941.11
	Cost of 1 Sqm.				₹ 894.11
	Say				₹ 894.10

10.16.6	Using white cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04007	Stone aggregate 12.5 mm	cum	0.197	₹ 4,005.00	₹ 788.99
04008	Stone aggregate 10 mm	cum	0.066	₹ 4,040.00	₹ 266.64
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03002	White Cement	tonne	0.082	₹ 18,000.00	₹ 1,476.00
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 6,296.49	₹ 125.93
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 6,422.42	₹ 513.79
	Add for water charges	@	1.00%	₹ 6,936.21	₹ 69.36
	Add for sundries and contingencies	@	3.00%	₹ 7,005.57	₹ 210.17
	Add for contractor's profit and overheads	@	15.00%	₹ 7,215.74	₹ 1,082.36
	Cost of 10 sqm.				₹ 8,298.10
	Cost of 1 Sqm.				₹ 829.81
	Say				₹ 829.80

10.17	Providing and laying 40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 28 mm thick cement concrete 1 : 2 : 4 (1 ordinary cement : 2 fine sand : 4 graded well burnt brick aggregate 12.5 mm nominal size) and top layer 12 mm thick with white, black, chocolate, grey, yellow, pink, blue or green marble chips of sizes from 7 mm to 10 mm nominal size laid in cement marble powder mix 3 : 1 (3 cement : 1 marble powder) by weight in proportion of 2 : 3 (2 cement marble powder mix : 3 marble chips) by volume including cement slurry etc. complete.

10.17.1	Using dark shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.197	₹ 3,075.00	₹ 605.78
04003	Well burnt brick aggregate 10 mm	cum	0.066	₹ 3,075.00	₹ 202.95
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				

03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03001	Cement	tonne	0.082	₹ 6,100.00	₹ 500.20
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
10007	Dark shade pigment @ 3.5Kg per 50Kg of cement = (3.50x82)/50 = 5.74Kg.	kg.	5.740	₹ 85.00	₹ 487.90
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,561.69	₹ 111.23
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,672.92	₹ 453.83
	Add for water charges	@	1.00%	₹ 6,126.75	₹ 61.27
	Add for sundries and contingencies	@	3.00%	₹ 6,188.02	₹ 185.64
	Add for contractor's profit and overheads	@	15.00%	₹ 6,373.66	₹ 956.05
	Cost of 10 sqm.				₹ 7,329.71
	Cost of 1 Sqm.				₹ 732.97
	Say				₹ 733.00

10.17.2	Using light shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.197	₹ 3,075.00	₹ 605.78
04003	Well burnt brick aggregate 10 mm	cum	0.066	₹ 3,075.00	₹ 202.95
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03001	Cement	tonne	0.082	₹ 6,100.00	₹ 500.20
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x82)/50 = 5.74Kg.	cum	5.740	₹ 85.00	₹ 487.90
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 5,561.69	₹ 111.23
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,672.92	₹ 453.83
	Add for water charges	@	1.00%	₹ 6,126.75	₹ 61.27
	Add for sundries and contingencies	@	3.00%	₹ 6,188.02	₹ 185.64
	Add for contractor's profit and overheads	@	15.00%	₹ 6,373.66	₹ 956.05
	Cost of 10 sqm.				₹ 7,329.71
	Cost of 1 Sqm.				₹ 732.97
	Say				₹ 733.00

10.17.3	Using ordinary cement in top layer with no pigment				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.197	₹ 3,075.00	₹ 605.78
04003	Well burnt brick aggregate 10 mm	cum	0.066	₹ 3,075.00	₹ 202.95
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03001	Cement	tonne	0.082	₹ 6,100.00	₹ 500.20
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone	@	2.00%	₹ 5,073.79	₹ 101.48
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 5,175.27	₹ 414.02
	Add for water charges	@	1.00%	₹ 5,589.29	₹ 55.89
	Add for sundries and contingencies	@	3.00%	₹ 5,645.18	₹ 169.36
	Add for contractor's profit and overheads	@	15.00%	₹ 5,814.54	₹ 872.18
	Cost of 10 sqm.				₹ 6,686.72
	Cost of 1 Sqm.				₹ 668.67
	Say				₹ 668.70

10.17.4	Using medium shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.197	₹ 3,075.00	₹ 605.78
04003	Well burnt brick aggregate 10 mm	cum	0.066	₹ 3,075.00	₹ 202.95
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03002	White Cement	tonne	0.082	₹ 18,000.00	₹ 1,476.00
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
10017	Medium shade pigment @ 3.5Kg per 50Kg of cement = (3.50x82)/50 = 5.74Kg.	cum	5.740	₹ 85.00	₹ 487.90
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				

	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 6,537.49	₹ 130.75
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 6,668.24	₹ 533.46
	Add for water charges	@	1.00%	₹ 7,201.70	₹ 72.02
	Add for sundries and contingencies	@	3.00%	₹ 7,273.72	₹ 218.21
	Add for contractor's profit and overheads	@	15.00%	₹ 7,491.93	₹ 1,123.79
	Cost of 10 sqm.				₹ 8,615.72
	Cost of 1 Sqm.				₹ 861.57
	Say				₹ 861.60

10.17.5 Using light shade pigment with white cement in top layer					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.197	₹ 3,075.00	₹ 605.78
04003	Well burnt brick aggregate 10 mm	cum	0.066	₹ 3,075.00	₹ 202.95
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31
03002	White Cement	tonne	0.082	₹ 18,000.00	₹ 1,476.00
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x82)/50 = 5.74Kg.	cum	5.740	₹ 85.00	₹ 487.90
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 6,537.49	₹ 130.75
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 6,668.24	₹ 533.46
	Add for water charges	@	1.00%	₹ 7,201.70	₹ 72.02
	Add for sundries and contingencies	@	3.00%	₹ 7,273.72	₹ 218.21
	Add for contractor's profit and overheads	@	15.00%	₹ 7,491.93	₹ 1,123.79
	Cost of 10 sqm.				₹ 8,615.72
	Cost of 1 Sqm.				₹ 861.57
	Say				₹ 861.60

10.17.6 Using white cement in top layer with no pigment					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	For underlayer 28mm thick				
04003	Well burnt brick aggregate 12.5 mm	cum	0.197	₹ 3,075.00	₹ 605.78
04003	Well burnt brick aggregate 10 mm	cum	0.066	₹ 3,075.00	₹ 202.95
04006	Carriage of stone aggregate	cum	0.263	₹ 159.75	₹ 42.01
02003	Fine sand	cum	0.132	₹ 370.00	₹ 48.84
0425	Carriage of Fine sand	cum	0.132	₹ 142.63	₹ 18.83
03001	Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
03001	Cement for slurry	tonne	0.090	₹ 6,100.00	₹ 549.00
0421	Carriage of cement	tonne	0.110	₹ 110.94	₹ 12.20
b)	For top layer 12mm thick				
03003	Marble chips 7 to 10 mm size	kg.	173.40	₹ 5.41	₹ 938.09
0431	Carriage of Marble chips	cum	0.102	₹ 130.51	₹ 13.31

03002	White Cement	tonne	0.082	₹ 18,000.00	₹ 1,476.00
0421	Carriage of cement	tonne	0.082	₹ 110.94	₹ 9.10
03004	Marble powder	cum	0.017	₹ 3,780.00	₹ 64.26
0431	Carriage of Marble powder	cum	0.017	₹ 130.51	₹ 2.22
	Labour:-				
0224	Mate	Day	0.23	₹ 300.00	₹ 69.00
0218*	Mason (average)	Day	1.75	₹ 400.00	₹ 700.00
0203	Beldar	Day	2.27	₹ 300.00	₹ 681.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	2.00%	₹ 6,049.59	₹ 120.99
	Add for hire and maintenance of mixer pumps, polishing machine etc.	@	8.00%	₹ 6,170.58	₹ 493.65
	Add for water charges	@	1.00%	₹ 6,664.23	₹ 66.64
	Add for sundries and contingencies	@	3.00%	₹ 6,730.87	₹ 201.93
	Add for contractor's profit and overheads	@	15.00%	₹ 6,932.80	₹ 1,039.92
	Cost of 10 sqm.				₹ 7,972.72
	Cost of 1 Sqm.				₹ 797.27
	Say				₹ 797.30

10.18	Providing and laying marble chips skirting (upto 300 mm height) rubbed and polished to granolithic finish, top layer 6 mm thick with white, black, chocolate, grey, yellow, pink, blue or green marble chips of sizes from 1 mm to 4 mm nominal size laid in cement marble powder mix 3 : 1 (3 cement : 1 marble powder) by weight in proportion of 4 : 7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc. complete.

10.18.1	18 mm thick with under layer 12 mm thick cement plaster 1 : 3 (1 Cement : 3 fine sand)

i.	Using dark shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 12mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 12mm thick cement mortar = 0.144 cum Extra for rounding = 0.030 cum Total = 0.174 cum	cum	0.174	₹ 3,992.09	₹ 694.62
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10007	Dark shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 5,783.63	₹ 289.18
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,072.81	₹ 60.73
	Add for water charges	@	1.00%	₹ 6,133.54	₹ 61.34
	Add for sundries and contingencies	@	3.00%	₹ 6,194.88	₹ 185.85
	Add for contractor's profit and overheads	@	15.00%	₹ 6,380.73	₹ 957.11
	Cost of 10 sqm.				₹ 7,337.84

	Cost of 1 Sqm.				₹ 733.78
	Say				₹ 733.80

ii.	Using light shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 12mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 12mm thick cement mortar = 0.144 cum Extra for rounding = 0.030 cum Total = 0.174 cum	cum	0.174	₹ 3,992.09	₹ 694.62
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 5,783.63	₹ 289.18
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,072.81	₹ 60.73
	Add for water charges	@	1.00%	₹ 6,133.54	₹ 61.34
	Add for sundries and contingencies	@	3.00%	₹ 6,194.88	₹ 185.85
	Add for contractor's profit and overheads	@	15.00%	₹ 6,380.73	₹ 957.11
	Cost of 10 sqm.				₹ 7,337.84
	Cost of 1 Sqm.				₹ 733.78
	Say				₹ 733.80

iii.	Using ordinary cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 12mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 12mm thick cement mortar = 0.144 cum Extra for rounding = 0.030 cum Total = 0.174 cum	cum	0.174	₹ 3,992.09	₹ 694.62
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00

	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone etc.	@	5.00%	₹ 5,539.68	₹ 276.98
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 5,816.66	₹ 58.17
	Add for water charges	@	1.00%	₹ 5,874.83	₹ 58.75
	Add for sundries and contingencies	@	3.00%	₹ 5,933.58	₹ 178.01
	Add for contractor's profit and overheads	@	15.00%	₹ 6,111.59	₹ 916.74
	Cost of 10 sqm.				₹ 7,028.33
	Cost of 1 Sqm.				₹ 702.83
	Say				₹ 702.80

iv.	Using medium shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 12mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 12mm thick cement mortar = 0.144 cum Extra for rounding = 0.030 cum Total = 0.174 cum	cum	0.174	₹ 3,992.09	₹ 694.62
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	Kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10017	Medium shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 6,271.53	₹ 313.58
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,585.11	₹ 65.85
	Add for water charges	@	1.00%	₹ 6,650.96	₹ 66.51
	Add for sundries and contingencies	@	3.00%	₹ 6,717.47	₹ 201.52
	Add for contractor's profit and overheads	@	15.00%	₹ 6,918.99	₹ 1,037.85
	Cost of 10 sqm.				₹ 7,956.84
	Cost of 1 Sqm.				₹ 795.68
	Say				₹ 795.70

v.	Using light shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 12mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 12mm thick cement mortar = 0.144 cum Extra for rounding = 0.030 cum Total = 0.174 cum	cum	0.174	₹ 3,992.09	₹ 694.62
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92

03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 6,271.53	₹ 313.58
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,585.11	₹ 65.85
	Add for water charges	@	1.00%	₹ 6,650.96	₹ 66.51
	Add for sundries and contingencies	@	3.00%	₹ 6,717.47	₹ 201.52
	Add for contractor's profit and overheads	@	15.00%	₹ 6,918.99	₹ 1,037.85
	Cost of 10 sqm.				₹ 7,956.84
	Cost of 1 Sgm.				₹ 795.68
	Say				₹ 795.70

vi.	Using white cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sgm				
	Materials:-				
a)	Under layer 12mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 12mm thick cement mortar = 0.144 cum Extra for rounding = 0.030 cum Total = 0.174 cum	cum	0.174	₹ 3,992.09	₹ 694.62
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone etc.	@	5.00%	₹ 6,027.58	₹ 301.38
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,328.96	₹ 63.29
	Add for water charges	@	1.00%	₹ 6,392.25	₹ 63.92
	Add for sundries and contingencies	@	3.00%	₹ 6,456.17	₹ 193.69
	Add for contractor's profit and overheads	@	15.00%	₹ 6,649.86	₹ 997.48
	Cost of 10 sqm.				₹ 7,647.34
	Cost of 1 Sgm.				₹ 764.73
	Say				₹ 764.70

10.18.2	21 mm thick with under layer 12 mm thick cement plaster 1 : 3 (1 Cement : 3 fine sand)

i.	Using dark shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sgm				
	Materials:-				

a)	Under layer 15mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 15mm thick cement mortar = 0.180 cum Extra for rounding = 0.022 cum Total = 0.202 cum	cum	0.202	₹ 3,992.09	₹ 806.40
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10007	Dark shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 5,895.41	₹ 294.77
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,190.18	₹ 61.90
	Add for water charges	@	1.00%	₹ 6,252.08	₹ 62.52
	Add for sundries and contingencies	@	3.00%	₹ 6,314.60	₹ 189.44
	Add for contractor's profit and overheads	@	15.00%	₹ 6,504.04	₹ 975.61
	Cost of 10 sqm.				₹ 7,479.65
	Cost of 1 Sqm.				₹ 747.97
	Say				₹ 748.00

ii.	Using light shade pigment with ordinary cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 15mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 15mm thick cement mortar = 0.180 cum Extra for rounding = 0.022 cum Total = 0.202 cum	cum	0.202	₹ 3,992.09	₹ 806.40
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 5,895.41	₹ 294.77
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,190.18	₹ 61.90

	Add for water charges	@	1.00%	₹ 6,252.08	₹ 62.52
	Add for sundries and contingencies	@	3.00%	₹ 6,314.60	₹ 189.44
	Add for contractor's profit and overheads	@	15.00%	₹ 6,504.04	₹ 975.61
	Cost of 10 sqm.				₹ 7,479.65
	Cost of 1 Sqm.				₹ 747.97
	Say				₹ 748.00

iii.	Using ordinary cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 15mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 15mm thick cement mortar = 0.180 cum Extra for rounding = 0.022 cum Total = 0.202 cum	cum	0.202	₹ 3,992.09	₹ 806.40
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03001	Cement	tonne	0.041	₹ 6,100.00	₹ 250.10
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone etc.	@	5.00%	₹ 5,651.46	₹ 282.57
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 5,934.03	₹ 59.34
	Add for water charges	@	1.00%	₹ 5,993.37	₹ 59.93
	Add for sundries and contingencies	@	3.00%	₹ 6,053.30	₹ 181.60
	Add for contractor's profit and overheads	@	15.00%	₹ 6,234.90	₹ 935.24
	Cost of 10 sqm.				₹ 7,170.14
	Cost of 1 Sqm.				₹ 717.01
	Say				₹ 717.00

iv.	Using medium shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 15mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 15mm thick cement mortar = 0.180 cum Extra for rounding = 0.022 cum Total = 0.202 cum	cum	0.202	₹ 3,992.09	₹ 806.40
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10017	Medium shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.870	₹ 85.00	₹ 243.95
	Labour:-				

0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 6,383.31	₹ 319.17
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,702.48	₹ 67.02
	Add for water charges	@	1.00%	₹ 6,769.50	₹ 67.70
	Add for sundries and contingencies	@	3.00%	₹ 6,837.20	₹ 205.12
	Add for contractor's profit and overheads	@	15.00%	₹ 7,042.32	₹ 1,056.35
	Cost of 10 sqm.				₹ 8,098.67
	Cost of 1 Sqm.				₹ 809.87
	Say				₹ 809.90

v.	Using light shade pigment with white cement in top layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 15mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 15mm thick cement mortar = 0.180 cum Extra for rounding = 0.022 cum Total = 0.202 cum	cum	0.202	₹ 3,992.09	₹ 806.40
	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
10027	Light shade pigment @ 3.5Kg per 50Kg of cement = (3.50x41)/50 = 2.87Kg.	kg.	2.87	₹ 85.00	₹ 243.95
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 6,383.31	₹ 319.17
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,702.48	₹ 67.02
	Add for water charges	@	1.00%	₹ 6,769.50	₹ 67.70
	Add for sundries and contingencies	@	3.00%	₹ 6,837.20	₹ 205.12
	Add for contractor's profit and overheads	@	15.00%	₹ 7,042.32	₹ 1,056.35
	Cost of 10 sqm.				₹ 8,098.67
	Cost of 1 Sqm.				₹ 809.87
	Say				₹ 809.90

vi.	Using white cement in top layer with no pigment				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
a)	Under layer 15mm thick				
03001	Cement for slurry	tonne	0.020	₹ 6,100.00	₹ 122.00
0421	Carriage of cement	tonne	0.020	₹ 110.94	₹ 2.22
	Cement mortar 1 : 3 (1 cement : 3 fine sand) 15mm thick cement mortar = 0.180 cum Extra for rounding = 0.022 cum Total = 0.202 cum	cum	0.202	₹ 3,992.09	₹ 806.40

	(Rate as per item no. 3.3)				
b)	Top layer 6mm thick				
03006	Marble chips 1 to 4 mm size	kg.	90.00	₹ 5.41	₹ 486.90
0431	Carriage of Marble chips	cum	0.053	₹ 130.51	₹ 6.92
03002	White Cement	tonne	0.041	₹ 18,000.00	₹ 738.00
0421	Carriage of cement	tonne	0.041	₹ 110.94	₹ 4.55
03004	Marble powder	cum	0.007	₹ 3,780.00	₹ 26.46
0431	Carriage of Marble powder	cum	0.007	₹ 130.51	₹ 0.91
	Labour:-				
0224	Mate	Day	0.47	₹ 300.00	₹ 141.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.03	₹ 300.00	₹ 2,109.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone etc.	@	5.00%	₹ 6,139.36	₹ 306.97
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 6,446.33	₹ 64.46
	Add for water charges	@	1.00%	₹ 6,510.79	₹ 65.11
	Add for sundries and contingencies	@	3.00%	₹ 6,575.90	₹ 197.28
	Add for contractor's profit and overheads	@	15.00%	₹ 6,773.18	₹ 1,015.98
	Cost of 10 sqm.				₹ 7,789.16
	Cost of 1 Sqm.				₹ 778.92
	Say				₹ 778.90

10.19	Extra for providing and fixing 2.0 mm thick, 40 mm wide aluminium strips in joints of terrazzo flooring complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre length				
	Materials:-				
10006	Aluminium strips 2 mm thick & 40 mm wide	kg.	2.31	₹ 200.00	₹ 462.00
	Labour:-				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0218*	Mason (average)	Day	0.25	₹ 400.00	₹ 100.00
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	Add for sundries and contingencies including carriage of aluminium strips etc.	@	3.00%	₹ 643.00	₹ 19.29
	Add for contractor's profit and overheads	@	15.00%	₹ 662.29	₹ 99.34
	Cost of 10 metre				₹ 761.63
	Cost of 1 metre				₹ 76.16
	Say				₹ 76.20

10.20	Extra for providing and fixing glass strips in joints of terrazzo flooring complete.				

10.20.1	40 mm wide and 4 mm thick.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre length				
	Materials:-				
10014	Glass strips = 10m Add 10% for wastage = 1m Total = 11m	Metre	1100.00%	₹ 22.00	₹ 242.00
	Labour:-				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0218*	Mason (average)	Day	0.25	₹ 400.00	₹ 100.00
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	Add for sundries and contingencies including carriage of glass strips etc.	@	3.00%	₹ 423.00	₹ 12.69
	Add for contractor's profit and overheads	@	15.00%	₹ 435.69	₹ 65.35
	Cost of 10 metre				₹ 501.04
	Cost of 1 metre				₹ 50.10
	Say				₹ 50.10

10.21	Extra for providing and laying terrazzo flooring complete on stair case treads not exceeding 300 mm in width including cost of forming, nosing etc.				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Labour:-				
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
0218*	Mason (average)	Day	0.60	₹ 400.00	₹ 240.00
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
	Add for water charges	@	1.00%	₹ 435.00	₹ 4.35
	Add for sundries and contingencies	@	3.00%	₹ 439.35	₹ 13.18
	Add for contractor's profit and overheads	@	15.00%	₹ 452.53	₹ 67.88
	Cost of 10 sqm.				₹ 520.41
	Cost of 1 Sqm.				₹ 52.04
	Say				₹ 52.00

10.22	Providing and fixing precast terrazzo tiles 22 mm thick with graded marble chips of size upto 12 mm, laid in floors, landings, on 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and polishing complete.

i.	In light shade using white cement				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10024	Precast terrazzo tiles 22 mm thick (light shade)	Sqm	11.000	₹ 290.00	₹ 3,190.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
03001	Cement for slurry	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
03002	White Cement for grouting	tonne	0.044	₹ 18,000.00	₹ 792.00
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
10027	Pigment	kg.	3.080	₹ 85.00	₹ 261.80
	Labour:-				
0224	Mate	Day	0.25	₹ 300.00	₹ 75.00
0218*	Mason (average)	Day	2.00	₹ 400.00	₹ 800.00
0203	Beldar	Day	2.50	₹ 300.00	₹ 750.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	5.00%	₹ 7,355.33	₹ 367.77
	Add for hire and maintenance of pumps, polishing machine etc.	@	6.00%	₹ 7,723.10	₹ 463.39
	Add for water charges	@	1.00%	₹ 8,186.49	₹ 81.86
	Add for sundries and contingencies	@	3.00%	₹ 8,268.35	₹ 248.05
	Add for contractor's profit and overheads	@	15.00%	₹ 8,516.40	₹ 1,277.46
	Cost of 10 sqm.				₹ 9,793.86
	Cost of 1 Sqm.				₹ 979.39
	Say				₹ 979.40

10.23	Providing and fixing precast terrazzo tiles 22 mm thick with graded marble chips of size upto 12 mm, laid in skirting, treads, risers of steps not exceeding 300 mm in height, on 12 mm thick bed of cement mortar 1 : 3 (1 cement : 3 fine sand) jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and polishing complete.

i.	In light shade using white cement				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
a.	Materials:-				
10024	Precast terrazzo tiles 22 mm thick (light shade)	Sqm	11.000	₹ 290.00	₹ 3,190.00
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	cum	0.144	₹ 3,992.09	₹ 574.86
03001	Cement for slurry	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
03002	White Cement for grouting	tonne	0.044	₹ 18,000.00	₹ 792.00
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
10027	Pigment	kg.	3.080	₹ 85.00	₹ 261.80
b.	Labour:-				
0224	Mate	Day	0.50	₹ 300.00	₹ 150.00

0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	7.50	₹ 300.00	₹ 2,250.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti/ Waterman	Day	0.15	₹ 300.00	₹ 45.00
c.	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	4.00%	₹ 9,191.82	₹ 367.67
	Add for hire and maintenance of pumps, polishing machine etc.	@	1.00%	₹ 9,559.49	₹ 95.59
	Add for water charges	@	1.00%	₹ 9,655.08	₹ 96.55
	Add for sundries and contingencies	@	3.00%	₹ 9,751.63	₹ 292.55
	Add for contractor's profit and overheads	@	15.00%	₹ 10,044.18	₹ 1,506.63
	Cost of 10 sqm.				₹ 11,550.81
	Cost of 1 Sqm.				₹ 1,155.08
	Say				₹ 1,155.10

10.24	Providing and fixing precast terrazzo tiles 22 mm thick with graded marble chips of size upto 12 mm, fixed in walls, on 12 mm thick bed of cement mortar 1 : 3 (1 cement : 3 fine sand) jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and polishing complete.				

i.	In light shade using white cement				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
a.	Materials:-				
10024	Precast terrazzo tiles 22 mm thick (light shade)	Sqm	11.000	₹ 290.00	₹ 3,190.00
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	cum	0.144	₹ 3,992.09	₹ 574.86
03001	Cement for slurry	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
03002	White Cement for grouting	tonne	0.044	₹ 18,000.00	₹ 792.00
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
10027	Pigment	kg.	3.080	₹ 85.00	₹ 261.80
b.	Labour:-				
0224	Mate	Day	0.39	₹ 300.00	₹ 117.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	4.50	₹ 300.00	₹ 1,350.00
0212	Coolie	Day	1.75	₹ 300.00	₹ 525.00
0205	Bhisti/ Waterman	Day	0.5	₹ 300.00	₹ 150.00
c.	Machineries:-				
	Add for cost of oxalic acid powder, carborundum stone & carriage of pigment etc.	@	0.50%	₹ 8,438.82	₹ 42.19
	Add for hire and maintenance of pumps, polishing machine etc.	@	0.50%	₹ 8,481.01	₹ 42.41
	Add for water charges	@	1.00%	₹ 8,523.42	₹ 85.23
	Add for sundries and contingencies	@	3.00%	₹ 8,608.65	₹ 258.26
	Add for contractor's profit and overheads	@	15.00%	₹ 8,866.91	₹ 1,330.04
	Cost of 10 sqm.				₹ 10,196.95
	Cost of 1 Sqm.				₹ 1,019.70
	Say				₹ 1,019.70

10.25	Providing and fixing precast chequered terrazzo tiles 22 mm thick with graded marble chips of size upto 6 mm, laid on floors, footpath & courtyard on 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and polishing complete.				

i.	In light shade using white cement				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
a.	Materials:-				
10013	Chequered terrazzo tiles 22 mm thick (light shade)	Sqm	11.000	₹ 330.00	₹ 3,630.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
03001	Cement for slurry	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
03002	White Cement for grouting	tonne	0.044	₹ 18,000.00	₹ 792.00
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
10027	Pigment	kg.	3.080	₹ 85.00	₹ 261.80

b.	Labour:-				
0224	Mate	Day	0.40	₹ 300.00	₹ 120.00
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	4.00	₹ 300.00	₹ 1,200.00
0212	Coolie	Day	2.50	₹ 300.00	₹ 750.00
0205	Bhisti/ Waterman	Day	0.50	₹ 300.00	₹ 150.00
c.	Machineries:-				
	Add for hire and maintenance of polishing machine with operator, pumps for water etc.	@	6.00%	₹ 9,095.33	₹ 545.72
	Add for cost of oxalic acid powder, carborundum stone & cloth etc.	@	4.00%	₹ 9,641.05	₹ 385.64
	Add for water charges	@	1.00%	₹ 10,026.69	₹ 100.27
	Add for sundries and contingencies	@	3.00%	₹ 10,126.96	₹ 303.81
	Add for contractor's profit and overheads	@	15.00%	₹ 10,430.77	₹ 1,564.62
	Cost of 10 sqm.				₹ 11,995.39
	Cost of 1 Sqm.				₹ 1,199.54
	Say				₹ 1,199.50

ii.	In dark shade using ordinary cement				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
a.	Materials:-				
10012	Chequered terrazzo tiles 22 mm thick (dark shade)	Sqm	11.000	₹ 195.00	₹ 2,145.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
03001	Cement for slurry	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
03001	Cement for grouting	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
10027	Pigment	kg.	3.080	₹ 85.00	₹ 261.80
b.	Labour:-				
0224	Mate	Day	0.41	₹ 300.00	₹ 123.00
0220	Mason 2nd class	Day	3.00	₹ 380.00	₹ 1,140.00
0203	Beldar	Day	4.25	₹ 300.00	₹ 1,275.00
0212	Coolie	Day	2.50	₹ 300.00	₹ 750.00
0205	Bhisti/ Waterman	Day	0.50	₹ 300.00	₹ 150.00
c.	Machineries:-				
	Add for hire and maintenance of polishing machine with operator, pumps for water etc.	@	6.00%	₹ 7,104.73	₹ 426.28
	Add for cost of oxalic acid powder, carborundum stone & cloth etc.	@	4.00%	₹ 7,531.01	₹ 301.24
	Add for water charges	@	1.00%	₹ 7,832.25	₹ 78.32
	Add for sundries and contingencies	@	3.00%	₹ 7,910.57	₹ 237.32
	Add for contractor's profit and overheads	@	15.00%	₹ 8,147.89	₹ 1,222.18
	Cost of 10 sqm.				₹ 9,370.07
	Cost of 1 Sqm.				₹ 937.01
	Say				₹ 937.00

10.26	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid and/or alkali resistant cement mortar bedding and joints filled with acid and/or alkali resisting cement as per IS : 4457 complete as per direction of Engineer-in-charge in dado/skirting on 12 mm thick mortar 1:4 (1 cement : 4 fine sand).				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm				
	Materials:-				
10003	Acid proof tiles of size 300x300mm, 10mm thick =11.11 nos+ Add wastage and breakage @ 2.5% = 0.28 nos. '= 11.39 nos. Say 12 nos.	10.00	12 Nos.	₹ 594.00	₹ 712.80
	12mm thick Cement mortar 1 : 4 (1 cement : 4 fine sand)	cum	0.0144	₹ 3,184.67	₹ 45.86
	(Rate as per item no. 3.4)				
03001	Cement for slurry =10.00x3.3 kg/sqm = 33 kg= 0.033 tonne	tonne	0.033	₹ 6,100.00	₹ 201.30
0421	Carriage of cement	tonne	0.033	₹ 110.94	₹ 3.66
10004	Acid proof cement	tonne	0.0066	₹ 9,000.00	₹ 59.40
03001	Less Ordinary Cement	tonne	0.0066	₹ 6,100.00	₹ -40.26

	Labour:-				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0221	Mason (for ornamental stone work) 1st class	Day	0.40	₹ 425.00	₹ 170.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
0205	Bhisti/ Waterman	Day	0.20	₹ 300.00	₹ 60.00
	Machineries:-				
	Add for water charges	@	1.00%	₹ 1,354.01	₹ 13.54
	Add for sundries and contingencies	@	3.00%	₹ 1,367.55	₹ 41.03
	Add for contractor's profit and overheads	@	15.00%	₹ 1,408.58	₹ 211.29
	Cost of 1 Sqm.				₹ 1,619.87
	Say				₹ 1,619.90

10.27	Providing and fixing Marble tiles in skirting, risers of steps, dado etc. (upto 2 m height) over 12 mm thick bed of cement mortar 1 : 3 (1 cement : 3 fine sand) jointed with ordinary cement slurry including pointing with white cement mixed with of matching shade complete.				
i.	8mm thick Rajnagar marble tiles (polished)				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10002	8 mm thick marble tiles = 10.00sqm. + Add for wastage 10% = 1.00sqm. Total = 11.00sqm.	Sqm	11.000	₹ 435.00	₹ 4,785.00
0469	Carriage of marble tiles = 0.008x11.00x2660 kg/cudm = 234.08 kg	tonne	0.234	₹ 110.94	₹ 25.97
	12mm thick Cement mortar 1 : 3 (1 cement : 3 fine sand) = 10.00x0.0144 = 0.144 cum	cum	0.144	₹ 3,992.09	₹ 574.86
	(Rate as per item no. 3.4)				
03001	Cement for slurry =10.00x3.3 kg/sqm = 33 kg= 0.033 tonne	tonne	0.033	₹ 6,100.00	₹ 201.30
0421	Carriage of cement	tonne	0.033	₹ 110.94	₹ 3.66
	Labour:-				
0221	Mason (for ornamental stone work) 1st class	Day	2.50	₹ 425.00	₹ 1,062.50
0212	Coolie	Day	2.50	₹ 300.00	₹ 750.00
0212	Bhisti/ Waterman	Day	1.00	₹ 300.00	₹ 300.00
	Machineries:-				
	Add for cost of white cement etc.	@	2.00%	₹ 7,703.29	₹ 154.07
	Add for water charges	@	1.00%	₹ 7,857.36	₹ 78.57
	Add for sundries and contingencies	@	3.00%	₹ 7,935.93	₹ 238.08
	Add for contractor's profit and overheads	@	15.00%	₹ 8,174.01	₹ 1,226.10
	Cost of 10 sqm.				₹ 9,400.11
	Cost of 1 Sqm.				₹ 940.01
	Say				₹ 940.00

10.28	Providing and fixing Marble stone in floors over 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with ordinary cement slurry including pointing with white cement mixed with of matching shade, including rubbing and polishing complete.				
10.28.1	18 mm thick Marble stone				
10.28.1.1	Makrana white marble 2nd quality				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10034	Makrana white 2nd quality : 18 mm thick marble slab = 10.00sqm. + Add for wastage 25% = 2.50sqm. Total = 12.50sqm.	Sqm	12.500	₹ 2,000.00	₹ 25,000.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) for jointing = 6 Kg. Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00

0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for polishing machine and pumps for water etc.	@	2.00%	₹ 27,133.92	₹ 542.68
	Add for cost of chemicals for polishing and carborundum stones, carriage of stone slabs etc.	@	3.00%	₹ 27,676.60	₹ 830.30
	Add for water charges	@	1.00%	₹ 28,506.90	₹ 285.07
	Add for sundries and contingencies	@	3.00%	₹ 28,791.97	₹ 863.76
	Add for contractor's profit and overheads	@	15.00%	₹ 29,655.73	₹ 4,448.36
	Cost of 10 sqm.				₹ 36,004.09
	Cost of 1 Sqm.				₹ 3,600.41
	Say				₹ 3,600.40

10.28.1.2 Raj Nagar plain marble (area not less than 0.1sqm each)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
07006	Raj Nagar plain marble: 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 850.00	₹ 10,625.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand). (Rate as per item no. 3.4)	cum	0.224	₹ 3,184.67	₹ 713.37
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for polishing machine and pumps for water etc.	@	2.00%	₹ 14,658.92	₹ 293.18
	Add for cost of chemicals for polishing and carborundum stones, carriage of stone slabs etc.	@	3.00%	₹ 14,952.10	₹ 448.56
	Add for water charges	@	1.00%	₹ 15,400.66	₹ 154.01
	Add for sundries and contingencies	@	3.00%	₹ 15,554.67	₹ 466.64
	Add for contractor's profit and overheads	@	15.00%	₹ 16,021.31	₹ 2,403.20
	Cost of 10 sqm.				₹ 18,424.51
	Cost of 1 Sqm.				₹ 1,842.45
	Say				₹ 1,842.50

10.28.1.3 Agaria White marble					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10005	Agaria white marble: 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 1,300.00	₹ 16,250.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand). (Rate as per item no. 3.4)	cum	0.224	₹ 3,184.67	₹ 713.37
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00

	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc.	@	3.00%	₹ 20,283.92	₹ 608.52
	Add for hire and maintenance of pumps, polishing machine etc.	@	2.00%	₹ 20,892.44	₹ 417.85
	Add for water charges	@	1.00%	₹ 21,310.29	₹ 213.10
	Add for sundries and contingencies	@	3.00%	₹ 21,523.39	₹ 645.70
	Add for contractor's profit and overheads	@	15.00%	₹ 22,169.09	₹ 3,325.36
	Cost of 10 sqm.				₹ 25,494.45
	Cost of 1 Sqm.				₹ 2,549.45
	Say				₹ 2,549.50

10.28.1.4 Black Zebra marble					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10008	Black zebra marble: 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 571.00	₹ 7,137.50
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc.	@	3.00%	₹ 11,171.42	₹ 335.14
	Add for hire and maintenance of pumps, polishing machine etc.	@	2.00%	₹ 11,506.56	₹ 230.13
	Add for water charges	@	1.00%	₹ 11,736.69	₹ 117.37
	Add for sundries and contingencies	@	3.00%	₹ 11,854.06	₹ 355.62
	Add for contractor's profit and overheads	@	15.00%	₹ 12,209.68	₹ 1,831.45
	Cost of 10 sqm.				₹ 14,041.13
	Cost of 1 Sqm.				₹ 1,404.11
	Say				₹ 1,404.10

10.28.1.5 Udaipur green marble					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10028	18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 875.00	₹ 10,937.50
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc.	@	3.00%	₹ 14,971.42	₹ 449.14

	Add for hire and maintenance of pumps, polishing machine etc.	@	2.00%	₹ 15,420.56	₹ 308.41
	Add for water charges	@	1.00%	₹ 15,728.97	₹ 157.29
	Add for sundries and contingencies	@	3.00%	₹ 15,886.26	₹ 476.59
	Add for contractor's profit and overheads	@	15.00%	₹ 16,362.85	₹ 2,454.43
	Cost of 10 sqm.				₹ 18,817.28
	Cost of 1 Sqm.				₹ 1,881.73
	Say				₹ 1,881.70

10.28.1.6	Pink plain marble				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10023	Pink plain marble: 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 890.00	₹ 11,125.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc.	@	3.00%	₹ 15,158.92	₹ 454.77
	Add for hire and maintenance of pumps, polishing machine etc.	@	2.00%	₹ 15,613.69	₹ 312.27
	Add for water charges	@	1.00%	₹ 15,925.96	₹ 159.26
	Add for sundries and contingencies	@	3.00%	₹ 16,085.22	₹ 482.56
	Add for contractor's profit and overheads	@	15.00%	₹ 16,567.78	₹ 2,485.17
	Cost of 10 sqm.				₹ 19,052.95
	Cost of 1 Sqm.				₹ 1,905.30
	Say				₹ 1,905.30

10.28.2	14 mm thick Marble stone				
10.28.2.1	Makrana white marble 2nd quality				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10035	Makrana white 2nd quality : 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 1,700.00	₹ 21,250.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for polishing machine and pumps for water etc.	@	2.00%	₹ 23,383.92	₹ 467.68
	Add for cost of chemicals for polishing and carborundum stones, carriage of stone slabs etc.	@	3.00%	₹ 23,851.60	₹ 715.55

	Add for water charges	@	1.00%	₹ 24,567.15	₹ 245.67
	Add for sundries and contingencies	@	3.00%	₹ 24,812.82	₹ 744.38
	Add for contractor's profit and overheads	@	15.00%	₹ 25,557.20	₹ 3,833.58
	Cost of 10 sqm.				₹ 31,290.78
	Cost of 1 Sqm.				₹ 3,129.08
	Say				₹ 3,129.10

10.28.2.2	Raj Nagar plain marble (area not less than 0.1sqm each)				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
07013	Raj Nagar plain marble: 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 700.00	₹ 8,750.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for polishing machine and pumps for water etc.	@	2.00%	₹ 12,783.92	₹ 255.68
	Add for cost of chemicals for polishing and carborundum stones, carriage of stone slabs etc.	@	3.00%	₹ 13,039.60	₹ 391.19
	Add for water charges	@	1.00%	₹ 13,430.79	₹ 134.31
	Add for sundries and contingencies	@	3.00%	₹ 13,565.10	₹ 406.95
	Add for contractor's profit and overheads	@	15.00%	₹ 13,972.05	₹ 2,095.81
	Cost of 10 sqm.				₹ 16,067.86
	Cost of 1 Sqm.				₹ 1,606.79
	Say				₹ 1,606.80

10.28.2.3	Agaria White marble				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10041	Agaria White marble: 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 1,000.00	₹ 12,500.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc.	@	3.00%	₹ 16,533.92	₹ 496.02
	Add for hire and maintenance of pumps, polishing machine etc.	@	2.00%	₹ 17,029.94	₹ 340.60
	Add for water charges	@	1.00%	₹ 17,370.54	₹ 173.71
	Add for sundries and contingencies	@	3.00%	₹ 17,544.25	₹ 526.33
	Add for contractor's profit and overheads	@	15.00%	₹ 18,070.58	₹ 2,710.59
	Cost of 10 sqm.				₹ 20,781.17

	Cost of 1 Sqm.				₹ 2,078.12
	Say				₹ 2,078.10

10.28.2.4 Black Zebra marble					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10042	Black Zebra marble: 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 435.00	₹ 5,437.50
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc.	@	3.00%	₹ 9,471.42	₹ 284.14
	Add for hire and maintenance of pumps, polishing machine etc.	@	2.00%	₹ 9,755.56	₹ 195.11
	Add for water charges	@	1.00%	₹ 9,950.67	₹ 99.51
	Add for sundries and contingencies	@	3.00%	₹ 10,050.18	₹ 301.51
	Add for contractor's profit and overheads	@	15.00%	₹ 10,351.69	₹ 1,552.75
	Cost of 10 sqm.				₹ 11,904.44
	Cost of 1 Sqm.				₹ 1,190.44
	Say				₹ 1,190.40

10.28.2.5 Udaipur green marble					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10043	Udaipur green marble: 18 mm thick marble slab = 10.00sqm. + <u>Add for wastage 25% = 2.50sqm.</u> Total = 12.50sqm.	Sqm	12.500	₹ 750.00	₹ 9,375.00
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) <u>for jointing = 6 Kg.</u> Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc.	@	3.00%	₹ 13,408.92	₹ 402.27
	Add for hire and maintenance of pumps, polishing machine etc.	@	2.00%	₹ 13,811.19	₹ 276.22
	Add for water charges	@	1.00%	₹ 14,087.41	₹ 140.87
	Add for sundries and contingencies	@	3.00%	₹ 14,228.28	₹ 426.85
	Add for contractor's profit and overheads	@	15.00%	₹ 14,655.13	₹ 2,198.27
	Cost of 10 sqm.				₹ 16,853.40
	Cost of 1 Sqm.				₹ 1,685.34
	Say				₹ 1,685.30

10.28.2.6 Pink plain marble					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10044	Pink plain marble: 18 mm thick marble slab = 10.00sqm. + Add for wastage 25% = 2.50sqm. Total = 12.50sqm.				
		Sqm	12.500	₹ 795.00	₹ 9,937.50
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry @4.4kg/sqm. (i) for bedding = 44 Kg. (ii) for jointing = 6 Kg. Total = 50 Kg.	tonne	0.050	₹ 6,100.00	₹ 305.00
0421	Carriage of cement	tonne	0.050	₹ 110.94	₹ 5.55
	Labour:- For finishing/polishing and fixing				
0219	Mason 1st class	Day	1.20	₹ 425.00	₹ 510.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc.	@	3.00%	₹ 13,971.42	₹ 419.14
	Add for hire and maintenance of pumps, polishing machine etc.	@	2.00%	₹ 14,390.56	₹ 287.81
	Add for water charges	@	1.00%	₹ 14,678.37	₹ 146.78
	Add for sundries and contingencies	@	3.00%	₹ 14,825.15	₹ 444.75
	Add for contractor's profit and overheads	@	15.00%	₹ 15,269.90	₹ 2,290.49
	Cost of 10 sqm.				₹ 17,560.39
	Cost of 1 Sqm.				₹ 1,756.04
	Say				₹ 1,756.00

10.29 Extra for prefinished nosing to treads of steps of marble stone.					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm.	Metre			
	Labour:-				
0221	Mason (for ornamental stone work) 1st class	Day	2.00	₹ 425.00	₹ 850.00
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0228	Beldar special for rubbing	Day	2.50	₹ 380.00	₹ 950.00
	Add for carriage of stones and cost of carborundum stones etc.	@	6.00%	₹ 2,250.00	₹ 135.00
	Add for water charges	@	1.00%	₹ 2,385.00	₹ 23.85
	Add for sundries and contingencies	@	3.00%	₹ 2,408.85	₹ 72.27
	Add for contractor's profit and overheads	@	15.00%	₹ 2,481.12	₹ 372.17
	Cost of 10 sqm.				₹ 2,853.29
	Cost of 1 Sqm.				₹ 285.33
	Say				₹ 285.30

10.30 Extra for marble flooring complete in treads of steps and risers using single length upto 2.00 metre.					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Labour:-				
0219	Mason 1st class	Day	1.95	₹ 425.00	₹ 828.75
0203	Beldar	Day	1.40	₹ 300.00	₹ 420.00
0212	Coolie	Day	0.75	₹ 300.00	₹ 225.00
0228	Beldar special for rubbing	Day	3.18	₹ 380.00	₹ 1,208.40
	Add for sundries and contingencies	@	3.00%	₹ 2,682.15	₹ 80.46
	Add for contractor's profit and overheads	@	15.00%	₹ 2,762.61	₹ 414.39
	Cost of 10 sqm.				₹ 3,177.00
	Cost of 1 Sqm.				₹ 317.70
	Say				₹ 317.70

10.31	Providing and fixing Kota stone in floors over 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with ordinary cement slurry including pointing with ordinary cement mixed with pigment of matching shade, including rubbing and polishing complete.				

10.31.1	Kota stone slab 25mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm	Sqm			
	Materials:-				
10020	25mm thick Kota stone slabs (polished) = 10.00 sqm Add for wastage = 1.50 sqm Total = 11.50 sqm	Sqm	11.500	₹ 335.00	₹ 3,852.50
0469	Carriage of slabs	tonne	0.670	₹ 110.94	₹ 74.33
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
03001	Cement for slurry: (i) for bedding = 44 kg (ii) for joints = 20 kg Total = 64 kg or 0.064 tonne	tonne	6.40%	₹ 6,100.00	₹ 390.40
0421	Carriage of cement	tonne	0.064	₹ 110.94	₹ 7.10
10007	Dark shade pigment @ 3.50 kgs. per 50 kg of cement	kg.	448.00%	₹ 85.00	₹ 380.80
	Labour:-				
0216	Foreman	Day	0.75	₹ 425.00	₹ 318.75
0220	Mason 2nd class	Day	1.20	₹ 380.00	₹ 456.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0205	Bhisti/ Waterman	Day	0.50	₹ 300.00	₹ 150.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for machine for polishing, pumps for water etc.	@	4.00%	₹ 8,843.25	₹ 353.73
	Add for cost of oxalic acid powder, carborundum stone, cloth etc including carriage of pigment.	@	3.00%	₹ 9,196.98	₹ 275.91
	Add for water charges	@	1.00%	₹ 9,472.89	₹ 94.73
	Add for sundries and contingencies	@	3.00%	₹ 9,567.62	₹ 287.03
	Add for contractor's profit and overheads	@	15.00%	₹ 9,854.65	₹ 1,478.20
	Cost of 10 sqm.				₹ 11,332.85
	Cost of 1 Sqm.				₹ 1,133.29
	Say				₹ 1,133.30

10.32	Kota stone slabs 25 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1 : 3 (1 cement : 3 fine sand) and joined with ordinary cement slurry mixed with pigment to match the shade of slabs, including rubbing and polishing complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10020	25mm thick Kota stone slabs (polished) = 10.00 sqm Add for wastage = 1.50 sqm Total = 11.50 sqm	Sqm	11.500	₹ 335.00	₹ 3,852.50
0469	Carriage of slabs	tonne	0.670	₹ 110.94	₹ 74.33
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	cum	0.224	₹ 3,992.09	₹ 894.23
	(Rate as per item no. 3.4)				
03001	Cement for slurry: (i) for bedding = 44 kg (ii) for joints = 20 kg Total = 64 kg or 0.064 tonne	tonne	0.064	₹ 6,100.00	₹ 390.40
0421	Carriage of cement	tonne	0.064	₹ 110.94	₹ 7.10
10007	Dark shade pigment @ 3.50 kgs. per 50 kg of cement	kg.	4.480	₹ 85.00	₹ 380.80
	Labour:-				
0220	Mason 2nd class	Day	3.00	₹ 380.00	₹ 1,140.00
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Beldar special for rubbing	Day	7.00	₹ 380.00	₹ 2,660.00

	Add for scaffolding	@	4.00%	₹ 10,599.36	₹ 423.97
	Add for cost of carborundum stone polishing chemical etc including carriage of pigment.	@	3.00%	₹ 11,023.33	₹ 330.70
	Add for water charges	@	1.00%	₹ 11,354.03	₹ 113.54
	Add for sundries and contingencies	@	3.00%	₹ 11,467.57	₹ 344.03
	Add for contractor's profit and overheads	@	15.00%	₹ 11,811.60	₹ 1,771.74
	Cost of 10 sqm.				₹ 13,583.34
	Cost of 1 Sqm.				₹ 1,358.33
	Say				₹ 1,358.30

10.33	Providing and fixing 25 mm thick wooden planking, tongued and grooved in floors including fixing with iron screws complete.				
10.33.1	With teak wood local				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm	Sqm			
	Materials:-				
08290	Second class indian teak wood Details of cost for 2.5x4=10 sqm. No of joints = $4000/138 = 28.97 = (29-1) = 28$ nos Qty of wood required = $2.5 \times (4 + 0.336) \times 0.025 = 0.271$ cum Add wastage @ 10 % $= 0.027$ cum Total = 0.2981 cum = 0.30 cum	cum	0.300	₹ 35,000.00	₹ 10,500.00
0473	Carriage of timber	cum	0.300	₹ 80.65	₹ 24.20
	Painting wood preservative (A)				
	As per item 12.41	Sqm	10.00	₹ 33.00	₹ 330.00
	Labour:-				
0224	Mate	Day	0.26	₹ 300.00	₹ 78.00
0209	Carpenter 1st class	Day	4.00	₹ 425.00	₹ 1,700.00
0212	Coolie	Day	2.50	₹ 300.00	₹ 750.00
	Machineries:-				
	Add for cost of synthetic resin adhesive & steel screws etc. except "A"	@	4.50%	₹ 13,052.20	₹ 587.35
	Add for extra fore timber to get selective wood etc. except "A"	@	25.00%	₹ 13,639.55	₹ 3,409.89
	Add for electricity except "A"	@	0.50%	₹ 17,049.44	₹ 85.25
	Add for sundries and contingencies except "A"	@	3.00%	₹ 17,134.69	₹ 514.04
	Add for contractor's profit and overheads except "A"	@	15.00%	₹ 17,648.73	₹ 2,647.31
	Cost of 10 Sqm				₹ 20,626.04
	Cost of 1 Sqm				₹ 2,062.60
	Say				₹ 2,062.60

10.34	38 mm thick wood block flooring of local teak wood laid over 25 mm thick leveling layer of cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 10 mm nominal size) to be paid separately, coated with a thin layer of hot bitumen penetration 80/25 (blown type) @ 2.45 kg per sqm, including fixing blocks in position after dipping in hot bitumen (blown type) up to half depth, planed, levelled smooth and finished complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1 Sqm	Sqm			
	Materials:-				
05006	Bitumen blown type i) For bed layer @ 2.45kg/sqm. = 2.45kg+ ii) For dipping blocks L.S. = 2.00Kg. Total = 4.45kg. Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	0.0044	₹ 36,820.00	₹ 162.01
0472	Carriage of bitumen	tonne	0.0044	₹ 110.94	₹ 0.49
08290	2nd class teal wood in scanting for wooden blocks 1 sqm x 0.038 m = 0.038 cum Add 10 % wastage = 0.0038 cum Total = 0.0418 cum or 41.8 cudm 2nd class teak wood in scantling	cum	0.042	₹ 35,000.00	₹ 1,470.00
0473	Carriage of timber	cum	0.042	₹ 80.65	₹ 3.39
	Labour:-				
0203	Belder	Day	2.25	₹ 300.00	₹ 675.00

0209	Carpenter 1st class	Day	2.00	₹ 425.00	₹ 850.00
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
	Machineries:-				
	Add for cost of fuel, kerosene oil, sand paper etc.	@	4.50%	₹ 3,653.39	₹ 164.40
	Add for extra fore timber to get selective wood etc.	@	25.00%	₹ 3,817.79	₹ 954.45
	Add for electricity	@	0.50%	₹ 4,772.24	₹ 23.86
	Add for sundries and contingencies	@	3.00%	₹ 4,796.10	₹ 143.88
	Add for contractor's profit and overheads	@	15.00%	₹ 4,939.98	₹ 741.00
	Cost of 1 Sqm				₹ 5,680.98
	Say				₹ 5,681.00

10.35	Providing & fixing in position high density fiber laminated wooden flooring with planks of sizes 8mm thick, 1202mm length (minimum) and 192 mm wide(minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) conforming to EN 13329 standard issued by Manufacturer. The flooring shall be fixed with tongue and groove interlocking system, with underlayment of 4mm thick expanded poly ethylene foam sheets having density 40kg/m3, over prepared surface with necessary T-profile planks of size 2286mm x 45mm x 15 mm and door reducer of size 2286mm x 45mm x 12 mm, wherever required. The wood planks shall have minimum density of 850 Kg/cum with Eco friendly UV coating, all complete as per direction of the Engineer in-charge.				
10.35.1	AC 3 Grade				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 m x 10 m = 100 sqm.				
	Materials:-				
10067	Laminated wood Plank Flooring 8mm thick of minimum size 1202mm x 192mm (Add for wastage @10%) = 110 sqm	sqm	110.00	₹ 985.00	₹ 108,350.00
10069	Laminated wood T-profile 15mm thick of size 2286mm x 45mm	metre	15.25	₹ 295.00	₹ 4,498.75
10070	Laminated wood door reducer 12mm thick of size 2286mm x 45mm	metre	2.00	₹ 295.00	₹ 590.00
10059	Expanded poly ethylene Foam sheet 4mm thick of Density 40kg/m3 sqm (Add for wastage @5%) = 105 sqm	sqm	105.00	₹ 18.00	₹ 1,890.00
	Labour:-				
0209	Carpenter 1st class	Day	2.50	₹ 425.00	₹ 1,062.50
0203	Beldar	Day	2.50	₹ 300.00	₹ 750.00
	Sundries				₹ 100.00
	Add for water charges	@	1.00%	₹ 117,141.25	₹ 1,171.41
	Add for contractor's profit and overheads	@	15.00%	₹ 118,312.66	₹ 17,746.90
	Cost of 100 sqm.				₹ 136,159.56
	Cost of 1 Sqm.				₹ 1,361.60
	Say				₹ 1,361.60

10.35.2	AC 4 Grade				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 m x 10 m = 100 sqm.				
	Materials:-				
10068	Laminated wood Plank Flooring 8mm thick of minimum size 1202mm x 192mm (Add for wastage @10%) = 110 sqm	sqm	110.00	₹ 1,200.00	₹ 132,000.00
10069	Laminated wood T-profile 15mm thick of size 2286mm x 45mm	metre	15.25	₹ 295.00	₹ 4,498.75
10070	Laminated wood door reducer 12mm thick of size 2286mm x 45mm	metre	2.00	₹ 295.00	₹ 590.00
10059	Expanded poly ethylene Foam sheet 4mm thick of Density 40kg/m3 sqm (Add for wastage @5%) = 105 sqm	sqm	105.00	₹ 18.00	₹ 1,890.00
	Labour:-				
0209	Carpenter 1st class	Day	2.50	₹ 425.00	₹ 1,062.50
0203	Beldar	Day	2.50	₹ 300.00	₹ 750.00
	Sundries				₹ 100.00
	Add for water charges	@	1.00%	₹ 140,791.25	₹ 1,407.91

	Add for contractor's profit and overheads	@	15.00%	₹ 142,199.16	₹ 21,329.87
	Cost of 100 sqm.				₹ 163,629.03
	Cost of 1 Sqm.				₹ 1,636.29
	Say				₹ 1,636.30

10.36	Providing & fixing in position high density fiber laminated wood in wall skirting with planks of sizes 12mm thick, 2286mm length (minimum) and 60mm wide(minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) conforming to EN 13329 standard issued by Manufacturer.The skirting shall be fixed with SS screws & rawl plugs, over prepared surface. The wood planks shall have minimum density of 850 Kg/cum with Eco friendly UV coating, all complete as per direction of the Engineer in-charge.				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 170 running metre Skirting				
	Materials:-				
10071	Laminated wood Skirting 12mm thick of Size 2286mm x 60mm 170 m Add 2.5% wastage= 4.25 Total = 174.25 m	metre	174.25	₹ 208.00	₹ 36,244.00
08239	Stainless steel screws 50 mm (75x2 = 150 Nos.)	100 Nos.	1.50	₹ 275.00	₹ 412.50
	Labour:-				
0209	Carpenter 1st class	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	Sundries				₹ 35.00
	Add for water charges	@	1.00%	₹ 37,381.50	₹ 373.82
	Add for contractor's profit and overheads	@	15.00%	₹ 37,755.32	₹ 5,663.30
	Cost of 170 m				₹ 43,453.62
	Cost of 1 m				₹ 255.61
	Say				₹ 255.60

10.37	Providing and fixing MS angle (50 x 50 x 5 mm) to act as nosing with lugs of MS flat 10 x 5 mm, 100 mm long forked at end 60 cm apart (minimum three lugs to be provided) including necessary welding and applying a priming coat of approved primer on exposed surface etc. complete.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3m i.e. (15.39+0.2kg=15.63kg)				
	Materials:-				
	Angle iron (50x50x5 mm) = 3.00m Add wastage @ 5% =0.15m Total = 3.15m @ 5.13kg/m =16.16kg Say, 0.162 Qtl.				
05056	Angle iron	Quintal	0.162	₹ 4,267.00	₹ 691.25
	Lugs (10x5mm flat)= (6x0.10)m = 0.60m Add wastage @ 5% =0.03m Total = 0.63m @ 0.40kg/m =0.252kg Say, 0.0025 Qtl.				
05026	M.S. flats	Quintal	0.0025	₹ 3,992.00	₹ 9.98
0468	Carriage of steel	tonne	0.01645	₹ 110.94	₹ 1.82
09022	Welding by electric plant	cm	6.00	₹ 2.00	₹ 12.00
	Priming coat (A)				
	As per item 12.33.3	Sqm	0.60	₹ 26.80	₹ 16.08
	Labour:-				
0207	Blaksmith 2nd class	Day	0.09	₹ 380.00	₹ 34.20
0219	Mason (brick layer) 1st class	Day	0.45	₹ 425.00	₹ 191.25
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	Add for cost of cutting, assembling, welding etc. except "A"	@	4.50%	₹ 1,019.58	₹ 45.88
	Add for electricity except "A"	@	1.00%	₹ 1,065.46	₹ 10.65
	Add for sundries and contingencies except "A"	@	3.00%	₹ 1,076.11	₹ 32.28
	Add for contractor's profit and overheads except "A"	@	15.00%	₹ 1,108.39	₹ 166.26
	Cost of 15.63 Kg.				₹ 1,290.73
	Cost of 1 Kg.				₹ 82.58
	Say				₹ 82.60

10.38	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades of any size as approved by Engineer-in-charge in skirting, risers of steps and dados over 12 mm thick bed of cement mortar 1 : 3 (1 cement : 3 fine sand) jointed with ordinary cement slurry including pointing with white cement mixed with pigment of matching shade complete.				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10011	Ceramic glazed wall tiles 300 x 300 mm=1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	Sqm	1.025	₹ 270.00	₹ 276.75
	12mm thick Cement mortar 1 : 4 (Rate as per item No.3.4)	Cum	0.0144	₹ 3,184.67	₹ 45.86
03001	Cement for slurry	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing and cost of pigment, white cement, pumps for water, lifts, carriage etc.	@	5.00%	₹ 539.36	₹ 26.97
	Add for water charges	@	1.00%	₹ 566.33	₹ 5.66
	Add for sundries and contingencies	@	3.00%	₹ 571.99	₹ 17.16
	Add for contractor's profit and overheads	@	15.00%	₹ 589.15	₹ 88.37
	Cost of 1 Sqm.				₹ 677.52
	Say				₹ 677.50

10.39	Providing and laying 1st quality ceramic glazed floor tiles of approved size conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades as approved by Engineer-in-charge over 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with ordinary cement slurry including pointing with white cement mixed with pigment of matching shade complete.				

10.39.1 Ceramic Glazed Tiles 1st quality 300 x 300mm in all shades and designs

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10010	Ceramic glazed wall tiles 300 x 300 mm=1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 270.00	₹ 276.75
	20mm thick Cement mortar 1 : 4 (Rate as per item No.3.4)	cum	0.024	₹ 3,184.67	₹ 76.43
03001	Cement for slurry	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing and cost of pigment, white cement, pumps for water, lifts, carriage etc.	@	5.00%	₹ 533.68	₹ 26.68
	Add for water charges	@	1.00%	₹ 560.36	₹ 5.60
	Add for sundries and contingencies	@	3.00%	₹ 565.96	₹ 16.98
	Add for contractor's profit and overheads	@	15.00%	₹ 582.94	₹ 87.44
	Cost of 1 Sqm.				₹ 670.38
	Say				₹ 670.40

10.39.2 Ceramic Glazed Tiles 1st quality 400 x 400mm in all shades and designs

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				

10009	Ceramic glazed wall tiles 400 x 400 mm=1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 360.00	₹ 369.00
	20mm thick Cement mortar 1 : 4	cum	0.024	₹ 3,184.67	₹ 76.43
	(Rate as per item No.3.4)				
03001	Cement for slurry	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing and cost of pigment, white cement, pumps for water, lifts, carriage etc.	@	5.00%	₹ 625.93	₹ 31.30
	Add for water charges	@	1.00%	₹ 657.23	₹ 6.57
	Add for sundries and contingencies	@	3.00%	₹ 663.80	₹ 19.91
	Add for contractor's profit and overheads	@	15.00%	₹ 683.71	₹ 102.56
	Cost of 1 Sqm.				₹ 786.27
	Say				₹ 786.30

10.39.3 Ceramic Glazed Tiles 1st quality 600 x 600mm in all shades and designs

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10045	Ceramic glazed wall tiles 600 x 600 mm=1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 430.00	₹ 440.75
	20mm thick Cement mortar 1 : 4	cum	0.024	₹ 3,184.67	₹ 76.43
	(Rate as per item No.3.4)				
03001	Cement for slurry	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing and cost of pigment, white cement, pumps for water, lifts, carriage etc.	@	5.00%	₹ 697.68	₹ 34.88
	Add for water charges	@	1.00%	₹ 732.56	₹ 7.33
	Add for sundries and contingencies	@	3.00%	₹ 739.89	₹ 22.20
	Add for contractor's profit and overheads	@	15.00%	₹ 762.09	₹ 114.31
	Cost of 1 Sqm.				₹ 876.40
	Say				₹ 876.40

10.40	Providing and laying rectified glazed ceramic floor tiles 300 x 300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours, shades such as white, ivory, grey, fume red, brown over 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with ordinary cement slurry including pointing with white cement mixed with pigment of matching shade complete.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10026	Rectified Ceramic glazed tiles 300 x 300 mm =1.000sqm Add for wastage & breakage @ 2.5 % = 0.025sqm Total = 1.025sqm	sqm	1.025	₹ 400.00	₹ 410.00
	20mm thick Cement mortar 1 : 4	cum	0.024	₹ 3,184.67	₹ 76.43
	(Rate as per item No.3.4)				
03001	Cement for slurry	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				

	Add for mortar for pointing and cost of pigment, white cement, pumps for water, lifts etc.	@	5.00%	₹ 666.93	₹ 33.35
	Add for water charges	@	1.00%	₹ 700.28	₹ 7.00
	Add for sundries and contingencies	@	3.00%	₹ 707.28	₹ 21.22
	Add for contractor's profit and overheads	@	15.00%	₹ 728.50	₹ 109.28
	Cost of 1 Sqm.				₹ 837.78
	Say				₹ 837.80

10.41	Providing and laying rectified glazed ceramic floor tiles 300 x 300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades except white, ivory, grey, fume red, brown over 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with ordinary cement slurry including pointing with white cement mixed with pigment of matching shade complete.				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10025	Rectified Ceramic glazed tiles 300 x 300 mm =1.000sqm Add for wastage & breakage @ 2.5 % = 0.025sqm Total = 1.025sqm	sqm	1.025	₹ 470.00	₹ 481.75
	20mm thick Cement mortar 1 : 4 (Rate as per item No.3.4)	cum	0.024	₹ 3,184.67	₹ 76.43
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing and cost of pigment, white cement, pumps for water, lifts etc.	@	5.00%	₹ 738.68	₹ 36.93
	Add for water charges	@	1.00%	₹ 775.61	₹ 7.76
	Add for sundries and contingencies	@	3.00%	₹ 783.37	₹ 23.50
	Add for contractor's profit and overheads	@	15.00%	₹ 806.87	₹ 121.03
	Cost of 1 Sqm.				₹ 927.90
	Say				₹ 927.90

10.42	Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08 % and conforming to IS : 15622 of approved make in all colours, shades over 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with ordinary cement slurry including pointing with white cement mixed with pigment of matching shade complete.				

10.42.1	Size of tile 50x50 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10030	Vitrified floor tile 50x50 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 510.00	₹ 522.75
	20mm thick Cement mortar 1 : 4 (Rate as per item No.3.4)	cum	0.024	₹ 3,184.67	₹ 76.43
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 779.68	₹ 38.98
	Add for water charges	@	1.00%	₹ 818.66	₹ 8.19
	Add for sundries and contingencies	@	3.00%	₹ 826.85	₹ 24.81
	Add for contractor's profit and overheads	@	15.00%	₹ 851.66	₹ 127.75

	Cost of 1 Sqm.				₹ 979.41
	Say				₹ 979.40

10.42.2	Size of tile 60x60 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10031	Vitrified floor tile 60x60 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 615.00	₹ 630.38
	20mm thick Cement mortar 1 : 4 (Rate as per item No.3.4)	cum	0.0224	₹ 3,184.67	₹ 71.34
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 882.22	₹ 44.11
	Add for water charges	@	1.00%	₹ 926.33	₹ 9.26
	Add for sundries and contingencies	@	3.00%	₹ 935.59	₹ 28.07
	Add for contractor's profit and overheads	@	15.00%	₹ 963.66	₹ 144.55
	Cost of 1 Sqm.				₹ 1,108.21
	Say				₹ 1,108.20

10.42.3	Size of tile 80x80 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10032	Vitrified floor tile 80x80 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 860.00	₹ 881.50
	20mm thick Cement mortar 1 : 4 (Rate as per item No.3.4)	cum	0.0224	₹ 3,184.67	₹ 71.34
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 1,133.34	₹ 56.67
	Add for water charges	@	1.00%	₹ 1,190.01	₹ 11.90
	Add for sundries and contingencies	@	3.00%	₹ 1,201.91	₹ 36.06
	Add for contractor's profit and overheads	@	15.00%	₹ 1,237.97	₹ 185.70
	Cost of 1 Sqm.				₹ 1,423.67
	Say				₹ 1,423.70

10.42.4	Size of tile 100x100 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10029	Vitrified floor tile 100x100 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 1,400.00	₹ 1,435.00
	20mm thick Cement mortar 1 : 4 (Rate as per item No.3.4)	cum	0.0224	₹ 3,184.67	₹ 71.34
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00

	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 1,686.84	₹ 84.34
	Add for water charges	@	1.00%	₹ 1,771.18	₹ 17.71
	Add for sundries and contingencies	@	3.00%	₹ 1,788.89	₹ 53.67
	Add for contractor's profit and overheads	@	15.00%	₹ 1,842.56	₹ 276.38
	Cost of 1 Sqm.				₹ 2,118.94
	Say				₹ 2,118.90

10.43	Deduct for not using 20mm thick cement mortar 1:4 (1 cement : 4 fine sand) bedding in laying of floor tiles.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 sqm where 20mm bed is not done	Sqm			
	Materials:-				
	20mm thick Cement mortar 1:4	cum	0.024	₹ 3,184.67	₹ 76.43
	(Rate as per item No.3.4)				
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:- For fixing				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 256.93	₹ 12.85
	Add for water charges	@	1.00%	₹ 269.78	₹ 2.70
	Add for sundries and contingencies	@	3.00%	₹ 272.48	₹ 8.17
	Add for contractor's profit and overheads	@	15.00%	₹ 280.65	₹ 42.10
	Cost of 1 Sqm.				₹ 322.75
	Say				₹ 322.80

10.44	Fixing glazed/Ceramic/Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, using 5kg. adhesive per sqm of tile area, in average 3mm thickness.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 sqm	Sqm			
	Materials:-				
10019	Quantity of high polymer modified quickset tile adhesive = 1.00x5 Kg/Sqm. = 5.00 Kg.	kg.	5.00	₹ 12.00	₹ 60.00
	Labour:- For fixing				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	Add for carriage adhesive, mortar for pointing etc.	@	50.00%	₹ 213.50	₹ 106.75
	Add for sundries and contingencies	@	3.00%	₹ 320.25	₹ 9.61
	Add for contractor's profit and overheads	@	15.00%	₹ 329.86	₹ 49.48
	Cost of 1 Sqm.				₹ 379.34
	Say				₹ 379.30

10.45	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.				

10.45.1	Size of tile 50x50 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10030	Vitrified floor tile 50x50 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 510.00	₹ 522.75
	12mm thick Cement mortar 1 : 3	cum	0.024	₹ 3,992.09	₹ 95.81
	(Rate as per item No.3.1.3)		0.014		

03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 835.31	₹ 41.77
	Add for water charges	@	1.00%	₹ 877.08	₹ 8.77
	Add for sundries and contingencies	@	3.00%	₹ 885.85	₹ 26.58
	Add for contractor's profit and overheads	@	15.00%	₹ 912.43	₹ 136.86
	Cost of 1 Sqm.				₹ 1,049.29
	Say				₹ 1,049.30

10.45.2 Size of tile 60x60 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10031	Vitrified floor tile 60x60 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 615.00	₹ 630.38
	12mm thick Cement mortar 1 : 3 (Rate as per item No.3.1.3)	cum	0.014	₹ 3,992.09	₹ 55.89
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 903.02	₹ 45.15
	Add for water charges	@	1.00%	₹ 948.17	₹ 9.48
	Add for sundries and contingencies	@	3.00%	₹ 957.65	₹ 28.73
	Add for contractor's profit and overheads	@	15.00%	₹ 986.38	₹ 147.96
	Cost of 1 Sqm.				₹ 1,134.34
	Say				₹ 1,134.30

10.45.3 Size of tile 80x80 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10032	Vitrified floor tile 80x80 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 860.00	₹ 881.50
	12mm thick Cement mortar 1 : 3 (Rate as per item No.3.1.3)	cum	0.014	₹ 3,992.09	₹ 55.89
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 1,154.14	₹ 57.71
	Add for water charges	@	1.00%	₹ 1,211.85	₹ 12.12
	Add for sundries and contingencies	@	3.00%	₹ 1,223.97	₹ 36.72
	Add for contractor's profit and overheads	@	15.00%	₹ 1,260.69	₹ 189.10
	Cost of 1 Sqm.				₹ 1,449.79
	Say				₹ 1,449.80

10.45.4 Size of tile 100x100 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				

10029	Vitrified floor tile 100x100 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 1,400.00	₹ 1,435.00
	12mm thick Cement mortar 1 : 3 (Rate as per item No.3.1.3)	cum	0.014	₹ 3,992.09	₹ 55.89
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 1,707.64	₹ 85.38
	Add for water charges	@	1.00%	₹ 1,793.02	₹ 17.93
	Add for sundries and contingencies	@	3.00%	₹ 1,810.95	₹ 54.33
	Add for contractor's profit and overheads	@	15.00%	₹ 1,865.28	₹ 279.79
	Cost of 1 Sqm.				₹ 2,145.07
	Say				₹ 2,145.10

10.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately)

10.46.1	Size of tile 50x50 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10030	Vitrified floor tile 50x50 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 510.00	₹ 522.75
10019	High polymer modified quickset tile adhesive	kg	10	₹ 12.00	₹ 120.00
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of adhesive etc.	@	5.00%	₹ 914.00	₹ 45.70
	Add for water charges	@	1.00%	₹ 959.70	₹ 9.60
	Add for sundries and contingencies	@	3.00%	₹ 969.30	₹ 29.08
	Add for contractor's profit and overheads	@	15.00%	₹ 998.38	₹ 149.76
	Cost of 1 Sqm.				₹ 1,148.14
	Say				₹ 1,148.10

10.46.2	Size of tile 60x60 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10031	Vitrified floor tile 60x60 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 615.00	₹ 630.38
10019	High polymer modified quickset tile adhesive	kg	10	₹ 12.00	₹ 120.00
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of adhesive etc.	@	5.00%	₹ 1,021.63	₹ 51.08
	Add for water charges	@	1.00%	₹ 1,072.71	₹ 10.73
	Add for sundries and contingencies	@	3.00%	₹ 1,083.44	₹ 32.50
	Add for contractor's profit and overheads	@	15.00%	₹ 1,115.94	₹ 167.39
	Cost of 1 Sqm.				₹ 1,283.33
	Say				₹ 1,283.30

10.46.3 Size of tile 80x80 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10032	Vitrified floor tile 80x80 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 860.00	₹ 881.50
10019	High polymer modified quickset tile adhesive	kg	10	₹ 12.00	₹ 120.00
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of adhesive etc.	@	5.00%	₹ 1,272.75	₹ 63.64
	Add for water charges	@	1.00%	₹ 1,336.39	₹ 13.36
	Add for sundries and contingencies	@	3.00%	₹ 1,349.75	₹ 40.49
	Add for contractor's profit and overheads	@	15.00%	₹ 1,390.24	₹ 208.54
	Cost of 1 Sqm.				₹ 1,598.78
	Say				₹ 1,598.80

10.46.4 Size of tile 100x100 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10029	Vitrified floor tile 100x100 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 1,400.00	₹ 1,435.00
10019	High polymer modified quickset tile adhesive	kg	10	₹ 12.00	₹ 120.00
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of adhesive etc.	@	5.00%	₹ 1,826.25	₹ 91.31
	Add for water charges	@	1.00%	₹ 1,917.56	₹ 19.18
	Add for sundries and contingencies	@	3.00%	₹ 1,936.74	₹ 58.10
	Add for contractor's profit and overheads	@	15.00%	₹ 1,994.84	₹ 299.23
	Cost of 1 Sqm.				₹ 2,294.07
	Say				₹ 2,294.10

10.47	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).

10.47.1 Size of tile 50x50 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10030	Vitrified floor tile 50x50 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 510.00	₹ 522.75
10019	High polymer modified quickset tile adhesive	kg	10	₹ 12.00	₹ 120.00
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of adhesive etc.	@	5.00%	₹ 862.75	₹ 43.14
	Add for water charges	@	1.00%	₹ 905.89	₹ 9.06
	Add for sundries and contingencies	@	3.00%	₹ 914.95	₹ 27.45
	Add for contractor's profit and overheads	@	15.00%	₹ 942.40	₹ 141.36
	Cost of 1 Sqm.				₹ 1,083.76
	Say				₹ 1,083.80

10.47.2 Size of tile 60x60 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10031	Vitrified floor tile 60x60 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 615.00	₹ 630.38
10019	High polymer modified quickset tile adhesive	kg	10	₹ 12.00	₹ 120.00
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of adhesive etc.	@	5.00%	₹ 970.38	₹ 48.52
	Add for water charges	@	1.00%	₹ 1,018.90	₹ 10.19
	Add for sundries and contingencies	@	3.00%	₹ 1,029.09	₹ 30.87
	Add for contractor's profit and overheads	@	15.00%	₹ 1,059.96	₹ 158.99
	Cost of 1 Sqm.				₹ 1,218.95
	Say				₹ 1,219.00

10.47.3 Size of tile 80x80 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10032	Vitrified floor tile 80x80 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 860.00	₹ 881.50
10019	High polymer modified quickset tile adhesive	kg	10	₹ 12.00	₹ 120.00
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of adhesive etc.	@	5.00%	₹ 1,221.50	₹ 61.08
	Add for water charges	@	1.00%	₹ 1,282.58	₹ 12.83
	Add for sundries and contingencies	@	3.00%	₹ 1,295.41	₹ 38.86
	Add for contractor's profit and overheads	@	15.00%	₹ 1,334.27	₹ 200.14
	Cost of 1 Sqm.				₹ 1,534.41
	Say				₹ 1,534.40

10.47.4 Size of tile 100x100 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10029	Vitrified floor tile 100x100 cm size =1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm	sqm	1.025	₹ 1,400.00	₹ 1,435.00
10019	High polymer modified quickset tile adhesive	kg	10	₹ 12.00	₹ 120.00
	Labour:-				
0219	Mason	Day	0.20	₹ 425.00	₹ 85.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of adhesive etc.	@	5.00%	₹ 1,775.00	₹ 88.75
	Add for water charges	@	1.00%	₹ 1,863.75	₹ 18.64
	Add for sundries and contingencies	@	3.00%	₹ 1,882.39	₹ 56.47
	Add for contractor's profit and overheads	@	15.00%	₹ 1,938.86	₹ 290.83
	Cost of 1 Sqm.				₹ 2,229.69
	Say				₹ 2,229.70

10.48	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.				

10.48.1 Size of tile 50x50 cm					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			

	Materials:-				
10046	Epoxy grout	kg	0.21	₹ 380.00	₹ 79.80
	Labour:-				
0219	Mason	Day	0.10	₹ 425.00	₹ 42.50
0205	Bhisti/ Waterman	Day	0.10	₹ 300.00	₹ 30.00
	Machineries:-				
	Add for carriage etc.	@	5.00%	₹ 152.30	₹ 7.62
	Add for water charges	@	1.00%	₹ 159.92	₹ 1.60
	Add for sundries and contingencies	@	3.00%	₹ 161.52	₹ 4.85
	Add for contractor's profit and overheads	@	15.00%	₹ 166.37	₹ 24.96
	Cost of 1 Sqm.				₹ 191.33
	Say				₹ 191.30

10.48.2	Size of tile 60x60 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10046	Epoxy grout	kg	0.18	₹ 380.00	₹ 68.40
	Labour:-				
0219	Mason	Day	0.08	₹ 425.00	₹ 34.00
0205	Bhisti/ Waterman	Day	0.08	₹ 300.00	₹ 24.00
	Machineries:-				
	Add for carriage etc.	@	6.00%	₹ 126.40	₹ 7.58
	Add for water charges	@	1.00%	₹ 133.98	₹ 1.34
	Add for sundries and contingencies	@	3.00%	₹ 135.32	₹ 4.06
	Add for contractor's profit and overheads	@	15.00%	₹ 139.38	₹ 20.91
	Cost of 1 Sqm.				₹ 160.29
	Say				₹ 160.30

10.48.3	Size of tile 80x80 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10046	Epoxy grout	kg	0.15	₹ 380.00	₹ 57.00
	Labour:-				
0219	Mason	Day	0.06	₹ 425.00	₹ 25.50
0205	Bhisti/ Waterman	Day	0.06	₹ 300.00	₹ 18.00
	Machineries:-				
	Add for carriage etc.	@	7.50%	₹ 100.50	₹ 7.54
	Add for water charges	@	1.00%	₹ 108.04	₹ 1.08
	Add for sundries and contingencies	@	3.00%	₹ 109.12	₹ 3.27
	Add for contractor's profit and overheads	@	15.00%	₹ 112.39	₹ 16.86
	Cost of 1 Sqm.				₹ 129.25
	Say				₹ 129.30

10.48.4	Size of tile 100x100 cm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				
10046	Epoxy grout	kg	0.11	₹ 380.00	₹ 41.80
	Labour:-				
0219	Mason	Day	0.04	₹ 425.00	₹ 17.00
0205	Bhisti/ Waterman	Day	0.04	₹ 300.00	₹ 12.00
	Machineries:-				
	Add for carriage etc.	@	10.50%	₹ 70.80	₹ 7.43
	Add for water charges	@	1.00%	₹ 78.23	₹ 0.78
	Add for sundries and contingencies	@	3.00%	₹ 79.01	₹ 2.37
	Add for contractor's profit and overheads	@	15.00%	₹ 81.38	₹ 12.21
	Cost of 1 Sqm.				₹ 93.59
	Say				₹ 93.60

10.49	Deduct for not grouting the joints with white cement and matching pigment in the items of fixing of vitrified tiles.				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1Sqm	Sqm			
	Materials:-				

	Mortar for pointing in white cement with matching pigment	LS	3.12	₹ 1.30	₹ 4.06
	Labour:-				
		LS	1	₹ 1.30	₹ 1.30
	Add for water charges	@	1.00%	₹ 5.36	₹ 0.05
	Add for sundries and contingencies	@	3.00%	₹ 5.41	₹ 0.16
	Add for contractor's profit and overheads	@	15.00%	₹ 5.57	₹ 0.84
	Cost of 1 Sqm.				₹ 6.41
	Say				₹ 6.40

10.50	Providing and fixing glazed screen printed border tile 75mm wide having thickness 5mm, of approved quality & make, in all shades, design and prints, in dado, over 12mm thick bed of cement mortar 1:3 (1 Cement : 3 fine sand) and jointing with grey cement slurry @ 3.3 kg/sqm including pointing with white cement mixed with pigment of matching shade, all complete as approved by Engineer - in - Charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details for 1sqm (i.e. 13.33m length)	Sqm			
	Materials:-				
10047	Border tiles 200x75mm size 5mm thick Tile required= $1.00/(0.20 \times 0.075)=66.70$ tile. Add 2.5% wastage = 1.67 tile Total 68.37 say 68 tiles	each	68	₹ 17.00	₹ 1,156.00
	12mm thick Cement mortar 1 : 3	cum	0.014	₹ 3,992.09	₹ 55.89
	(Rate as per item No.3.1.3)				
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0033	₹ 6,100.00	₹ 20.13
0421	Carriage of cement	tonne	0.0033	₹ 110.94	₹ 0.37
	Labour:-				
0219	Mason	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for mortar for pointing, cost of pigment and white cement, add for pumps & water lifts etc.	@	5.00%	₹ 1,428.64	₹ 71.43
	Add for water charges	@	1.00%	₹ 1,500.07	₹ 15.00
	Add for sundries and contingencies	@	3.00%	₹ 1,515.07	₹ 45.45
	Add for contractor's profit and overheads	@	15.00%	₹ 1,560.52	₹ 234.08
	Cost of 1 sqm				₹ 1,794.60
	Cost of 1 metre				₹ 134.63
	Say				₹ 134.60

10.51	Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 fine sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement, all complete as per direction of Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details for 10sqm	Sqm			
	Materials:-				
	Under layer 12mm thick Cement mortar 1 : 4	cum	0.014	₹ 3,184.67	₹ 44.59
	(Rate as per item No.3.1.4)				
	Labour:-				
0220	Mason (2nd class)	Day	0.67	₹ 380.00	₹ 254.60
0203	Beldar	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhisti/ Waterman	Day	0.92	₹ 300.00	₹ 276.00
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0400	₹ 6,100.00	₹ 244.00
0421	Carriage of cement	tonne	0.0400	₹ 110.94	₹ 4.44
	Labour:-				
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00

	Top layer with tile piece and gap filling with cement mortar: Ceramic tile piece for crazy flooring assuming 70% tile area and 30% of joint filler/mixture. $(7.00 \times 0.010) = 0.07$ $0.872 \times 0.07 / 0.051 = 1.20$ qtl Ceremic Tiles Pieces for Crazy Flooring	qtl.	1.2	₹ 140.00	₹ 168.00
	Cement mortar 1 : 4 for filling of Crazy tile	cum	0.03	₹ 3,184.67	₹ 95.54
	(Rate as per item No.3.1.4)				
10049	Synthetic polyster triangular	per bag of 50 kg cement	1.38	₹ 46.88	₹ 64.69
	Water proofing materials [Rate as per item No. 4.5.2] [A]	per bag of 50 kg cement	1.38	₹ 79.10	₹ 109.16
	Labour:-				
0219	Mason (1st class)	Day	1.38	₹ 425.00	₹ 586.50
0203	Beldar	Day	1.20	₹ 300.00	₹ 360.00
0205	Bhisti/ Waterman	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
	Machineries:-				
	Add forcarriage, scaffolding, add for pumps & water lifts etc. [except A]	@	10.00%	₹ 3,073.36	₹ 307.34
	Add for water charges [except A]	@	1.00%	₹ 3,380.70	₹ 33.81
	Add for sundries and contingencies [except A]	@	3.00%	₹ 3,414.51	₹ 102.44
	Add for contractor's profit and overheads [except A]	@	15.00%	₹ 3,516.95	₹ 527.54
	Cost of 10 sqm				₹ 4,153.65
	Cost of 1 metre				₹ 415.37
	Say				₹ 415.40

10.52	Crazy marble stone flooring, including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black or white and black marble chips of sizes from 1 mm to 4 mm nominal size by volume), with under layer 25 mm thick cement concrete 1:2:4 (1 cement : 2 fine sand : 4 graded stone aggregate 12.5 mm nominal size), including rubbing, polishing and cement slurry etc. complete.				
11.52.1	14 mm thick crazy marble stone white, black or as specified				
Code	Description	Unit	Quantity	Rate	Amount
	Details for 10sqm	Sqm			
	Materials:-				
	Under layer 25mm thick Cement concrete 1 : 2 : 4 [A]	cum	0.25	₹ 9,385.70	₹ 2,346.43
	(Rate as per item No.10.12.1)				
03001	Cement for slurry over bed @ 3.3kg/sqm	tonne	0.0400	₹ 6,100.00	₹ 244.00
0421	Carriage of cement	tonne	0.0400	₹ 110.94	₹ 4.44
	Labour:-				
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
10050	Top layer with marble pieces and gap filling with marble powder mixture Marble pieces for crazy flooring (Assume 70% of marble stone are and 30% of joint filer/mixture $7 \text{sqm} \times 0.02 \text{m} = 0.14 \text{ cum}$ $0.872 \times 0.14 / 0.051 = 2.40 \text{q}$ White marble rajnagar plain stone pieces for crazy flooring	qtl.	2.4	₹ 160.00	₹ 384.00
03002	White cement	tonne	0.041	₹ 18,000.00	₹ 738.00
03004	Marble dust power	tonne	0.007	₹ 3,780.00	₹ 26.46
10027	Red, chocolate, orange, buff or yellow (red oxide of iron) light shade pigment @ 3.5kg/50kg of cement = $40.5 \times 3.5 / 50 = 2.84 \text{kg}$	kg	2.84	₹ 85.00	₹ 241.40
03006	Marble chips upto 4mm and downsize White & black	qtl.	0.87	₹ 541.00	₹ 471.75
0421	Carriage of cement	tonne	0.0410	₹ 110.94	₹ 4.55
0431	Carriage of marble dust, marble chips	cum	0.0510	₹ 130.51	₹ 6.66
0469	Cariage of stone	tonne	0.2400	₹ 110.94	₹ 26.63
	Labour:-				
0219	Mason (1st class)	Day	1.20	₹ 425.00	₹ 510.00

0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0205	Bhisti/ Waterman	Day	0.54	₹ 300.00	₹ 162.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0228	Skilled belder (for rubbing floor)	Day	5.00	₹ 380.00	₹ 1,900.00
	Add for cost of oxalic acid powder, carborundum stone & carriage of marble slab etc. [except A]	@	5.00%	₹ 5,469.89	₹ 273.49
	Add for hire and maintenance of pumps, polishing machine etc. [except A]	@	2.00%	₹ 5,743.38	₹ 114.87
	Add for water charges [except A]	@	1.00%	₹ 5,858.25	₹ 58.58
	Add for sundries and contingencies [except A]	@	3.00%	₹ 5,916.83	₹ 177.50
	Add for contractor's profit and overheads [except A]	@	15.00%	₹ 6,094.33	₹ 914.15
	Cost of 10 sqm.				₹ 9,354.91
	Cost of 1 Sqm.				₹ 935.49
	Say				₹ 935.50

10.53	Providing and fixing Glass mosaic tiles on finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design , fixing in customize design as per direction of Engineer-in- Charge. The glass mosaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Engineer-in-Charge.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 8Sqm	Sqm			
	Materials:-				
10052	Glass mosaic tiles (20 mm x 20 mm x 4mm) Add for wastage 2.5%= 0.2 sqm Total: 8.20 sqm	sqm	8.200	₹ 1,185.00	₹ 9,717.00
	Glass mosaic tiles (20 mm x 20 mm x 4 mm)				
10051	Tile fixing chemical adhesive	kg	20	₹ 22.00	₹ 440.00
10053	Cement polymer Grout Compound	kg	10	₹ 30.00	₹ 300.00
10054	Acid for cleaning tiles	litre	4	₹ 20.00	₹ 80.00
	Labour:-				
0219	Mason	Day	1.60	₹ 425.00	₹ 680.00
0203	Beldar	Day	1.60	₹ 300.00	₹ 480.00
0205	Bhisti/ Waterman	Day	0.05	₹ 300.00	₹ 15.00
	Machineries:-				
	Add for carriage of tiles, adhesive etc.	@	5.00%	₹ 11,712.00	₹ 585.60
	Add for water charges	@	1.00%	₹ 12,297.60	₹ 122.98
	Add for sundries and contingencies	@	3.00%	₹ 12,420.58	₹ 372.62
	Add for contractor's profit and overheads	@	15.00%	₹ 12,793.20	₹ 1,918.98
	Cost of 8 sqm.				₹ 14,712.18
	Cost of 1 Sqm.				₹ 1,839.02
	Say				₹ 1,839.00

10.54	Providing and fixing 25 mm thick pre-polished colored concrete designer tiles making by strong vibratory compaction technology using 50% white cement and 50% ordinary cement of size 300mm x 300mm, laid in footpath & courtyard, on 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete as per direction of the Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10001	25 mm thick pre-polished colored concrete designer tiles of size 300mm x 300mm (using 50% white cement and 50% ordinary cement)	Sqm	10.500	₹ 385.00	₹ 4,042.50
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
03001	Cement for slurry	tonne	0.0275	₹ 6,100.00	₹ 167.75
0421	Carriage of cement	tonne	0.0275	₹ 110.94	₹ 3.05
03001	Cement for grouting	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
	Labour:-				
0203	Mason (average)	Day	1.60	₹ 400.00	₹ 640.00
0203	Beldar	Day	1.60	₹ 300.00	₹ 480.00
0205	Bhisti/ Waterman	Day	0.50	₹ 300.00	₹ 150.00

	Machineries:-				
	Add for carriage of materials etc.	@	0.50%	₹ 6,469.95	₹ 32.35
	Add for water charges	@	1.00%	₹ 6,502.30	₹ 65.02
	Add for sundries and contingencies	@	3.00%	₹ 6,567.32	₹ 197.02
	Add for contractor's profit and overheads	@	15.00%	₹ 6,764.34	₹ 1,014.65
	Cost of 10 sqm.				₹ 7,778.99
	Cost of 1 Sqm.				₹ 777.90
	Say				₹ 777.90

10.55	Providing and fixing precast chequered cement concrete tiles 18 mm thick, laid in footpath & courtyard, on 20 mm thick bed of cement mortar 1 : 4 (1 cement : 4 fine sand) jointed with neat cement slurry including rubbing and cleaning complete as per direction of the Engineer-in-Charge.				

i.	In dark shade using ordinary cement				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
10012	Chequered tiles 18 mm thick (dark shade)	Sqm	10.500	₹ 195.00	₹ 2,047.50
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.224	₹ 3,184.67	₹ 713.37
03001	Cement for slurry	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
03001	Cement for grouting	tonne	0.044	₹ 6,100.00	₹ 268.40
0421	Carriage of cement	tonne	0.044	₹ 110.94	₹ 4.88
	Labour:-				
0220	Mason 2nd class	Day	1.40	₹ 380.00	₹ 532.00
0212	Coolie	Day	1.40	₹ 300.00	₹ 420.00
0205	Bhisti/ Waterman	Day	0.50	₹ 300.00	₹ 150.00
	Add for water charges	@	1.00%	₹ 4,409.43	₹ 44.09
	Add for sundries and contingencies	@	3.00%	₹ 4,453.52	₹ 133.61
	Add for contractor's profit and overheads	@	15.00%	₹ 4,587.13	₹ 688.07
	Cost of 10 sqm.				₹ 5,275.20
	Cost of 1 Sqm.				₹ 527.52
	Say				₹ 527.50

10.56	Providing and laying 500x500x40 mm thick Turf paver (Turf pave XD) on 150 mm thick sub grade of compacted bed of 20 mm thick nominal size well burnt brick aggregate and base course and filling with 150 mm thick fine sand, including spreading, well ramming, consolidating and finishing smooth etc. all complete as per direction of Engineer-in-charge.				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
04006	Brick Aggregate (Single size) : 20 mm nominal size 1 x 10 x 0.15 = 1.5cum	cum	1.500	₹ 2,975.00	₹ 4,462.50
0405	Carriage: Stone aggregate	cum	1.500	₹ 159.75	₹ 239.63
	Labour:- [for spreading ramming and consolidation of sub grade]				
0212	Coolie	Day	0.70	₹ 300.00	₹ 210.00
0203	Beldar	Day	0.52	₹ 300.00	₹ 156.00
0205	Bhisti/ Waterman	Day	0.36	₹ 300.00	₹ 108.00
	Providing and filling of sand [Rate vide 2.18] -[A]	cum	1.50	₹ 615.70	₹ 923.55
10055	500x500x40 mm thick Turf paver	sqm	10.00	₹ 580.00	₹ 5,800.00
	Labour:- [for laying of Turf pave]				
0219	Mason (brick layer) 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	Machineries:-				
	Add for carriage of materials etc. [except A]	@	0.50%	₹ 11,488.63	₹ 57.44
	Add for water charges [except A]	@	1.00%	₹ 11,546.07	₹ 115.46
	Add for sundries and contingencies [except A]	@	3.00%	₹ 11,661.53	₹ 349.85
	Add for contractor's profit and overheads [except A]	@	15.00%	₹ 12,011.38	₹ 1,801.71
	Cost of 10 sqm.				₹ 14,736.64
	Cost of 1 Sqm.				₹ 1,473.66
	Say				₹ 1,473.70

10.57	Providing & fixing in position Phenol bonded Bamboowood flooring with planks of sizes 14mm thick, 1800mm length (minimum) and 130 mm wide(minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC). The flooring shall be fixed with tongue and groove interlocking system, with underlayment of 4mm thick expanded poly ethylene foam sheets having density 40kg/cum, over prepared surface with necessary quarter round planks of size 1900mm x 18mm and door reducer of size 1900mm x 44mm, wherever required. The bamboo wood planks shall have minimum density of 1000 Kg/cum & minimum Hardness 1000 Kgf. with Eco friendly UV coating, all complete as per direction of the Engineer in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 m x 10 m = 100 sqm.				
	Materials:-				
10056	Bamboo wood Tile Flooring 14mm thick of minimum size 1800mm x 130mm sqm (Add for wastage @10%) = 110 sqm	sqm	110.00	₹ 3,775.00	₹ 415,250.00
10057	Bamboo wood Quarter Round 18mm thick of size 1900mm x 18mm	metre	39.90	₹ 125.00	₹ 4,987.50
10058	Bamboo wood door reducer 14mm thick of size 1900mm x 44mm	metre	2.00	₹ 275.00	₹ 550.00
10059	Expanded poly ethylene Foam sheet 4mm thick of Density 40kg/m ³ sqm (Add for wastage @5%) = 105 sqm	sqm	105.00	₹ 18.00	₹ 1,890.00
10060	Silicon based Joint Sealant for Tiles	kg	5.00	₹ 150.00	₹ 750.00
10061	Rubber base Adhesive	kg	5.00	₹ 160.00	
	Labour:-				
0210	Carpenter 1st class	Day	3.00	₹ 425.00	₹ 1,275.00
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	Sundries				₹ 170.00
	Add for water charges	@	1.00%	₹ 425,602.50	₹ 4,256.03
	Add for contractor's profit and overheads	@	15.00%	₹ 429,858.53	₹ 64,478.78
	Cost of 100 sqm.				₹ 494,507.31
	Cost of 1 Sqm.				₹ 4,945.07
	Say				₹ 4,945.10

10.58	Providing & fixing in position Phenol bonded Bamboo wood in wall skirting with planks of sizes 14mm thick, 1900mm length (minimum) and 85mm wide(minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC). The skirting shall be fixed with SS screws & rawl plugs, over underlayment of 4mm thick, expanded poly ethylene foam sheets having 40kg/cum density over prepared surface. The bamboo wood planks shall have minimum density of 1000 Kg/cum & minimum Hardness 1000 Kgf. with Eco friendly UV coating, all complete as per direction of the Engineer in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm. Skirting				
	Materials:-				
10062	Bamboo wood Skirting 14mm thick of Size 1900mm x 85mm Area of 1 length skirting is 1.9 m x 0.085 m = 0.162 sqm Quantity required for 10 sqm = 10 / 0.1615 = 61.92 pieces Add 2.5% wastage= 1.548 Total = 61.92 + 1.548 = 63.468 Qty in running mtr = 63.468 x 1.9m = 120.59 running meter	metre	120.59	₹ 325.00	₹ 39,191.75
10059	Expanded poly ethylene Foam sheet 4mm thick of Density 40kg/m ³ sqm (Add for wastage @5%) = 105 sqm	sqm	10.50	₹ 18.00	₹ 189.00
10060	Silicon based Joint Sealant for Tiles	kg	1.00	₹ 150.00	₹ 150.00
10061	Rubber base Adhesive	kg	1.00	₹ 160.00	₹ 160.00
08239	Stainless steel screws 50 mm (62x3 = 186 Nos.)	100 Nos.	1.86	₹ 275.00	₹ 511.50
	Labour:-				
0210	Carpenter 1st class	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	Sundries				₹ 35.00
	Add for water charges	@	1.00%	₹ 40,927.25	₹ 409.27
	Add for contractor's profit and overheads	@	15.00%	₹ 41,336.52	₹ 6,200.48

	Cost of 10 sqm.				₹ 47,572.00
	Cost of 1 Sqm.				₹ 4,757.20
	Say				₹ 4,757.20

10.59	Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1800mm length (minimum) and 130 mm wide (minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC), with necesasary profiled edges fixed with 40mm SS screws 5 nos in each tile to frame work made of local teak wood of size 20x15 mm in centre of each tile and bottom and top of work height, 40x15mm placed at ends of each tile. The cladding shall be laid over backlayment of 1.00 mm thick expanded poly ethylene foam of density 40kg/cum in two layers, first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The bomboo wood planks shall have minimum density of 1000 Kg/cum & minimum Hardness 1000 Kgf. with Eco friendly UV coating, all complete as per direction of the Engineer in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 m x 9.5 m = 95 sqm				
	Materials:-				
10063	Bamboo wood Tile Wall Cladding 10mm thick of size 1900mm x 135mm10 x 9.5 = 95 + 9.5 (Add for wastage @10%) = 104.5 sqm	sqm	104.50	₹ 3,375.00	₹ 352,687.50
10064	Bamboo wood T-mold 14mm thick of size 1900mm x 44mm At end joints of planks = 4x9.91 = 39.64 mtr + 1.98 (Add for wastage 5%) = 41.62 mtr	metre	41.62	₹ 275.00	₹ 11,445.50
10065	Bamboo wood Threshold 14mm thick of size 1900mm x 44mm At perriferi of cladding = 2x(10+9.5)+1.95 (Add for wastage @5%) =40.95 metre	metre	40.95	₹ 275.00	₹ 11,261.25
08290	Local teak wood in planks 10 metre height, at every 1.9 meter height one length of 10 metre i.e (5x9.91x0.02x .015+2x10x0.02x.015+2x9.50x.02x.015+ 4x9.91x0.04x0.015)+wastage @5% =0.052866 cum	cum	0.05287	₹ 35,000.00	₹ 1,850.45
10066	High Density expanded poly ethylene (EPE) Foam 1mm thick (2x10x9.5) = 190 + 9.5 (Add for wastage @5%)=199.5 sqm	sqm	199.50	₹ 8.50	₹ 1,695.75
08239	Stainless steel screws 50 mm @500mm c/c at teak wood frame	100 Nos.	2.58	₹ 275.00	₹ 709.50
08241	Stainless steel screws 30 mm (5nos in each panels) No of panels=95/(1.9 x 0.135)=370 nos No. of screws= 370 x 5=1850 nos	100 Nos.	18.50	₹ 208.00	₹ 3,848.00
	Labour:-				
0210	Carpenter 1st class	Day	5.00	₹ 425.00	₹ 2,125.00
0210	Carpenter 2nd class	Day	5.00	₹ 380.00	₹ 1,900.00
0203	Beldar	Day	5.00	₹ 300.00	₹ 1,500.00
	Sundries				₹ 150.00
	Add for water charges	@	1.00%	₹ 389,022.95	₹ 3,890.23
	Add for contractor's profit and overheads	@	15.00%	₹ 392,913.18	₹ 58,936.98
	Cost of 95 sqm.				₹ 452,000.16
	Cost of 1 Sqm.				₹ 4,757.90
	Say				₹ 4,757.90

10.59	Providing and fixing Wooden planking in flooring with 38mm thick Indian Teak wood plank in pattern as directed, tongue and groove jointed including fixing to approved wooden base frame work with necessary wood-screws / approved adhesives including melamine polishing etc. complete including preparation of shop drawing & obtaining approval of the Engineer.

S U B - H E A D - 1 1



R O O F I N G

**SUB HEAD : 11.0 / ROOFING
BASIC RATES**

Code No.	Description	Unit	Rate
0205	Bhisti/Waterman	Day	₹ 300.00
0209	Carpenter 1st class	Day	₹ 425.00
0203	Beldar	Day	₹ 300.00
0212	Coolie/ Helper	Day	₹ 300.00
0216	Foreman	Day	₹ 425.00
0215	Fitter (grade 1)	Day	₹ 380.00
0223	Mason (for plaster of paris work) 1st class	Day	₹ 425.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0227	Painter	Day	₹ 340.00
0218*	Mason (average)	Day	₹ 400.00
0208*	Carpenter (average)	Day	₹ 400.00
11061	Seam bolts and nuts 6 mm dia and 25 mm long	10 Nos	₹ 45.00
05044	Non - Asbestos multi purpose fibre cement board 6mm thick.	sqm	₹ 282.00
04011	Paving bitumen Grade VG-10 of approved quality	tonne	₹ 36,820.00
11086	White face insulating board:12 mm thick	sqm	₹ 275.00
11031	Natural colour insulating board:12 mm thick	sqm	₹ 242.00
11015	Flame retardant face insulating board: 12 mm thick	sqm	₹ 360.00
08002	Flat pressed 3 layer particle board (medium density) Grade I :12 mm thick	sqm	₹ 364.00
11007	Bright finished or black enameled mild steel screws 40 mm	100 Nos	₹ 69.00
11016	Fuel wood	quintal	
02004	Kerosene oil	litre	₹ 48.00
11060	Roofing paint for iron sheets in red colour	litre	₹ 125.00
12031	Plaster of Paris	kilogram	₹ 6.50
11035	Plug	each	₹ 11.00
02003	Sand (Fine): Selected quarry	cum	₹ 370.00
11021	Galvanised steel plain sheets	quintal	₹ 5,235.00
11064	Standard quality hard board sheet 3 mm thick	sqm	₹ 145.00
11065	Standard quality hard board sheet 4.5 mm thick	sqm	₹ 165.00
05026	Flats up to 10 mm in thickness	quintal	₹ 3,992.00
05029	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	₹ 15.00
11020	Galvanised steel J or L hooks 8 mm dia	10 Nos	₹ 125.00

Code No.	Description	Unit	Rate
05027	Galvanised steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	₹ 22.00
08290	Local teak wood in planks	10 cudm	₹ 350.00
08281	Other wood in planks	10 cudm	₹ 194.00
11017	G.I. Limpet washer	100 Nos	₹ 37.00
11006	Bitumen washer	100 Nos	₹ 32.00
11018	G.I. plain washer for seam bolts	100 Nos	₹ 32.00
04015	Water proofing materials	kilogram	₹ 36.00
05066	Wire nails	kilogram	₹ 66.00
11087	Wire mesh (rabbit)	sqm	₹ 45.00
11036	Polyvinyl chloride sheet 400 micron thick	sqm	₹ 42.00
11019	Galvanised steel corrugated sheets	quintal	₹ 5,635.00
12037	Red oxide Zinc chromate primer	litre	₹ 70.00
11027	Joint filler	kilogram	₹ 30.00
11028	Joint finisher	kilogram	₹ 27.00
11029	Joint tape roll	roll	₹ 115.00
11012	Dash fastener/ Chemical fastener	each	₹ 14.00
11005	All drive screws (for gypsum board)	100 Nos	₹ 65.00
05050	Rawl plug 50 mm (designation 10 no.)	each	₹ 7.00
11014	Expanded polystyrene type N- Normal 50 mm thick	sqm	₹ 135.00
11013	Expanded polystyrene type - SE 50 mm thick	sqm	₹ 165.00
11075	u-PVC pipes (working pressure 4 kg / cm ²) Single socketed pipe 75 mm dia.	metre	₹ 80.00
11074	u-PVC pipes (working pressure 4 kg / cm ²) Single socketed pipe 110 mm dia.	metre	₹ 150.00
11073	u-PVC pipes (working pressure 4 kg / cm ²) Rubber (Seal) Ring 75 mm dia.	each	₹ 9.00
11072	u-PVC pipes (working pressure 4 kg / cm ²) Rubber (Seal) Ring 110 mm dia.	each	₹ 14.00
11069	u-PVC coupler for UPVC drainage pipes 75 mm	each	₹ 22.00
11068	u-PVC coupler for UPVC drainage pipes 110 mm	each	₹ 46.00
11079	u-PVC pushfit coupler (single) 75 mm thick	each	₹ 22.00
11078	u-PVC pushfit coupler (single) 110 mm thick	each	₹ 38.00
11083	u-PVC single equal Tee (without door) 75x75x75 mm	each	₹ 54.00
11082	u-PVC single equal Tee (without door) 110x110x110 mm	each	₹ 95.00
11081	u-PVC single equal Tee (with door) 75x75x75 mm	each	₹ 69.00
11080	u-PVC single equal Tee (with door) 110x110x110 mm	each	₹ 108.00

Code No.	Description	Unit	Rate
11067	u-PVC bend 87.5° 75 mm bend	each	₹ 41.00
11066	u-PVC bend 87.5° 110 mm bend	each	₹ 69.00
11077	u-PVC plain shoe 75 mm bend	each	₹ 31.00
11076	u-PVC plain shoe 110 mm bend	each	₹ 55.00
11071	u-PVC pipe clip 75 mm bend	each	₹ 18.00
11070	u-PVC pipe clip 110 mm bend	each	₹ 19.00
11058	Resin Bonded Glass wool 16 kg/m³ 50 mm thick	sqm	₹ 112.00
11059	Resin Bonded Glass wool 24 kg/m³ 50 mm thick	sqm	₹ 160.00
11057	Pressed clay tiles	1000 Nos	₹ 10,000.00
11034	Plain ceiling tiles (BWP type phenol formaldehyde synthetic resin bonded) (600x600x12 mm)	each	₹ 130.00
11003	3 mm thick translucent white acrylic plastic sheet	sqm	₹ 590.00
11001	12 thick particle board ceiling tile	sqm	₹ 125.00
19003	PTMT grating 100/110 mm dia.	each	₹ 48.00
19114	PTMT grating 75 mm dia.	each	₹ 40.00
11030	Galvanised Steel Main T ceiling sections 24x38x0.33 mm (3 metre long)	each	₹ 116.00
11033	Galvanised Steel Perimeter wall angle 24x24x0.40 mm (3 metre long)	each	₹ 85.00
11026	Galvanised Steel Intermediate cross T section 24x25x0.33 mm (1.2 mtrs)	each	₹ 39.00
11025	Galvanised Steel Intermediate cross T section 24x25x0.33 mm (0.6 mtrs)	each	₹ 20.00
11023	Hanger rod 4 mm thick	each	₹ 10.00
11004	Adjustment clip 85x30x0.8 mm	each	₹ 6.00
11062	Soffit cleat (Size 27x37x25x1.60 mm)	each	₹ 5.00
11011	Dash fastener 6 mm dia 50 mm long	each	₹ 10.00
11085	UV stabilised 2 mm thick plain FRP sheet .	sqm	₹ 515.00
11084	UV stabilised 2 mm thick corrugated FRP sheet .	sqm	₹ 585.00
11049	Pre-coated galvanised iron profile sheet 0.50 mm TCT	sqm	₹ 400.00
11054	Pre-coated galvanised steel plain ridges/Valley/Gutter/Flashing 0.5mm thick	metre	₹ 245.00
11037	Pre-painted Galvalume sheet 0.40 mm	sqm	₹ 400.00
11038	Pre-painted Galvalume sheet 0.45 mm	sqm	₹ 430.00
11039	Pre-painted Galvalume sheet 0.50 mm	sqm	₹ 515.00
11040	Pre-painted Galvalume sheet 0.60 mm	sqm	₹ 610.00
11041	Pre-painted Galvalume sheet 0.80 mm	sqm	₹ 812.00
11043	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.4mm thick	metre	₹ 230.00

Code No.	Description	Unit	Rate
11042	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.45mm thick	metre	₹ 240.00
11044	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.5mm thick	metre	₹ 282.00
11045	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.6mm thick	metre	₹ 340.00
11046	Pre-painted Galvalume sheet plain ridges/Valley/Gutter/Flashing 0.8mm thick	metre	₹ 434.00
11002	200G virgin polythene sheet	sqm	₹ 6.00
11088	Resin Bonded Rockwool 48 kg/m3	sqm	₹ 135.00
11089	High Albedo paint	kg	₹ 260.00
11090	Galvanised Steel ceiling sections 80x26x0.5 mm	metre	₹ 53.00
11091	Galvanised Steel Perimeter channel 20x27x30x0.50 mm	metre	₹ 26.00
11092	Galvanised Steel Intermediate channel 15x45x15x0.90 mm	metre	₹ 44.00
11093	Galvanised Steel angle hanger (ceiling angle: 25x10x0.50 mm	metre	₹ 15.00
11094	Galvanised Steel connecting clips (2.64 mm dia and 230 mm long GI wire)	each	₹ 5.00
11095	Galvanised Steel soffit cleat (Size 27x37x25x0.60 mm)	each	₹ 4.00
11096	12.5 mm thick tapered edge gypsum plain borad	sqm	₹ 190.00
11097	Galvanised Steel soffit cleat (Size 27x37x25x0.60 mm)	each	₹ 6.00
11098	Galvanised Steel soffit cleat (Size 27x37x25x0.60 mm)	each	₹ 7.00
11099	Primer (for gypsum board)	litre	₹ 80.00
11100	12.5 mm thick tapered edge gypsum fire resistant board	sqm	₹ 287.00
11101	12.5 mm thick tapered edge gypsum moisture resistant board	sqm	₹ 320.00
11102	12.5 mm thick Fully Perforated Gypsum Plaster Board	sqm	₹ 490.00
11103	GI Metal Tile Lay-in Plain Tegular edge global white color tiles of Size 595x595mm and 0.5 mm thick	sqm	₹ 575.00
11104	GI Metal Tile Lay-in Perforated Tegular edge global white color tiles of Size 595x595mm and 0.5 mm thick	sqm	₹ 675.00
11105	PVC Laminated Gypsum Tiles (Square edge) of Size 595x595 mm and 12.5 mm thick	sqm	₹ 515.00
11106	Gypsum Tiles Fully Perforated Square edge of Size 595x595 mm and 12.5 mm thick	sqm	₹ 540.00
11107	Calcium Silicate tegular edged ceiling tiles 495x495 mm and 15 mm thick	sqm	₹ 935.00
11108	8mm thick Calcium silicate perforated tiles of size 595 x595mm	sqm	₹ 735.00

Code No.	Description	Unit	Rate
11109	8 mm thick tapered edge calcium silicate board	sqm	₹ 285.00
11110	15 mm thick, light weight, integral densified micro look edged,false ceiling tiles of size 595x595 mm.	sqm	₹ 990.00
11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	₹ 28.00
11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	₹ 16.00
11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	₹ 35.00
11114	40 mm long S.S screws with plastic rawl plugs	each	₹ 3.50
11115	Powder coated steel section main-T ceiling sections 15x42x0.40 mm (3000 mm long)	each	₹ 248.00
11116	Galvanized mild steel perimeter wall angle 22x19x0.40 mm (3000 mm long)	each	₹ 121.00
11117	Powder coated Galvanised Iron intermediate cross-T section 15x42x0.40 mm (1200 mm long)	each	₹ 100.00
11118	Powder coated Galvanized Iron intermediate cross-T section 15x42x0.40mm (600 mm long)	each	₹ 50.00
11119	15 mm thick, light weight, integral densified micro look edged,false ceiling tiles of size 595x595 mm.	sqm	₹ 990.00
11120	Galvanized iron main-T ceiling sections 15x32x0.33 mm (3000 mm long)	each	₹ 208.00
11121	Galvanized iron intermediate crossT section 15x32x0.33 mm (1200 mm long)	each	₹ 85.00
11122	Galvanized iron intermediate crossT section 15x32x0.33 mm (600 mm long)	each	₹ 38.00
11123	12 mm thick micro tegular edged semi perforated GFRG (Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x 595 mm	sqm	₹ 692.00
11124	12 mm thick micro tegular edged fully perforated GFRG (Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x 595 mm	sqm	₹ 780.00
11125	With 16 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.55 to 0.6)	sqm	₹ 865.00
11126	20 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.7)	sqm	₹ 1,095.00
11127	Mineral fibre beveled tegular edged ceiling tiles 595x595 mm, 16 mm thick with bioblock, confirming to ISO 5 (class 100) specifications	sqm	₹ 945.00
0473	Carriage: Timber	cum	₹ 80.65
0468	Carriage: Steel	tonne	₹ 110.94
0403	Carriage: Brick tiles	1000 Nos	₹ 199.69

Code No.	Description	Unit	Rate
0472	Carriage: Tar bitumen	tonne	₹ 110.94
0425	Carriage: Fine Sand	cum	₹ 142.63
0428	Carriage: G.I.sheet and accessories	tonne	₹ 110.94
0434	Carriage: Plaster of paris	tonne	₹ 110.94

SUB HEAD : 11
ROOFING

GALVANISED STEEL SHEET ROOFING

11.1	Providing corrugated G.S. sheet roofing including vertical/curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces) excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
11.1.1	0.80mm thick with zinc coating not less than 275gm/m ²				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider an area of a roof with each sloping side. Length : 20.085 m Breadth: 5.10 (per side) Sheet thickness : 0.80mm Area covered = 2x20.085x5.10 = 204.867 sqm Derivation of length & breadths: Length: Assuming 30 Nos. of sheets to be used, overlaps will be 29 Nos. i.e. 29x0.135 (overlap) = 3.915m Width of a corrugated sheet taking 10 Nos. of corrugations, end to end measurement would be 10x0.08 = 0.80 m Length of shed covered: 30x0.80 = 24.0m Less: overlap = 3.915 m Total = 20.085m Breadth: C.G.S Sheet = 2.50m + C.G.S. sheet = 2.80m Total = 5.30m Deduct overlap = 0.20m Effective breadth = 5.10m				
	MATERIALS				
11019	C.G.S sheets (2.50mx0.8m)- 0.80 mm thick = 2x30 = 60 Nos. = 8.571 bundles of 7 sheet each Weight = 8.751x110.7 kg/bundle = 948.8 kg.....(i) C.G.S sheets (2.80mx0.8m)- 0.80 mm thick = 2x30 = 60 Nos. = 10 bundles Weight = 10x106.30 kg/bundle = 1063.00 kg.....(ii) Total = 2011.80 kg = 20.118 q	q	20.118	₹ 5,635.00	₹ 113,364.93
05029	G.I. seam bolts & nuts 600mm c/c in zig-zag fashion i.e. actual distance c/c is 300mm No. of bolts required for a breadth of 5.10m and for one lap = 5.1/0.30 = 17 Nos. Total No. of bolts required = 2x29(overlaps)x17 Nos. = 986 Nos.	10 Nos.	986	₹ 15.00	₹ 1,479.00
11020	Polymer coated J or L hooks: 8 mm dia. (Considering 5 Nos. of purlins to be used on either side) = 2x5x30x3 = 900Nos.	10 Nos.	900	₹ 125.00	₹ 11,250.00
11017	Limpet washers = Total of seam and J bolts = 986+900 = 1886 Nos.	cent	1886	₹ 37.00	₹ 697.82

11006	Bitumen washers	cent	1886	₹ 32.00	₹ 603.52
12037	Zink chromate yellow primer	litre	0.5	₹ 70.00	₹ 35.00
11060	Ready mixed paint on new work	litre	0.35	₹ 125.00	₹ 43.75
	CARRIAGE				
0428	Sheets	tonne	2.0118	₹ 110.94	₹ 223.19
	LABOUR:				
0216	Foreman	Day	3.00	₹ 425.00	₹ 1,275.00
0209	Carpenter	Day	9.000	₹ 425.00	₹ 3,825.00
0212	Helper	Day	27.00	₹ 300.00	₹ 8,100.00
0227	Painter	Day	2.50	₹ 340.00	₹ 850.00
0212	Coolie (F)	Day	5.000	₹ 300.00	₹ 1,500.00
					₹ 143,247.21
	Add for carriage of bolts, nuts, paint etc.	@	0.09%		₹ 128.92
					₹ 143,376.13
	Add for brushes for painting, sand paper, scaffolding etc.	@	0.35%		₹ 501.82
					₹ 143,877.95
	Add for hoisting arrangements including winch, pulleys, ropes etc.	@	0.90%		₹ 1,294.90
					₹ 145,172.85
	Add for Sundries and contingencies	@	3%		₹ 4,355.19
					₹ 149,528.04
	Add for contractor's profit and overheads	@	15%		₹ 22,429.21
	Cost of 0.80mm thick C.G.S. sheet roofing of area 204.867 sqm				₹ 171,957.25
	Cost per sqm				₹ 839.36
	Rate per sqm	Say			₹ 839.40

11.1.2	0.63mm thick with zinc coating not less than 275gm/m ²				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider an area of a roof with each sloping side. Length : 20.085 m Breadth: 5.10 (per side) Sheet thickness : 0.80mm Area covered = 2x20.085x5.10 = 204.867 sqm Derivation of length & breadths: Length: Assuming 30 Nos. of sheets to be used, overlaps will be 29 Nos. i.e. 29x0.135 (overlap) = 3.915m Width of a corrugated sheet taking 10 Nos. of corrugations, end to end measurement would be 10x0.08 = 0.80 m Length of shed covered: 30x0.80 = 24.0m Less: overlap = 3.915 m Total = 20.085m Breadth: C.G.S Sheet = 2.50m + C.G.S. sheet = 2.80m Total = 5.30m Deduct overlap = 0.20m Effective breadth = 5.10m				

	MATERIALS				
11019	C.G.S sheets (2.50mx0.8m)- 0.63 mm thick = 2x30 = 60 Nos. =6.666 bundles Weight = 6.666x115.30 kg/bundle = 768.59 kg.....(i) C.G.S sheets (2.80mx0.8m)- 0.63 mm thick = 2x30 = 60 Nos. =7.5 bundles Weight = 7.5x114.9 kg/bundle = 861.75 kg.....(ii) Total = 1630.34 kg = 16.30 q	q	16.3	₹ 5,635.00	₹ 91,850.50
05029	G.I. seam bolts & nuts 600mm c/c in zig-zag fashion i.e. actual distance c/c is 300mm No. of bolts required for a breadth of 5.10m and for one lap = 5.1/0.30 = 17 Nos. Total No. of bolts required = 2x29(overlaps)x17 Nos. = 986 Nos.	10 Nos.	986	₹ 15.00	₹ 1,479.00
11020	Polymer coated J or L hooks: 8 mm dia. (Considering 5 Nos. of purlines to be used on either side) = 2x5x30x3 = 900Nos.	10 Nos.	900	₹ 125.00	₹ 11,250.00
11017	Limpet washers = Total of seam and J bolts = 986+900 = 1886 Nos.	cent	1886	₹ 37.00	₹ 697.82
11006	Bitumen washers	cent	1886	₹ 32.00	₹ 603.52
12037	Zink chromate yellow primer	litre	2.82	₹ 70.00	₹ 197.40
11060	Ready mixed paint on new work	litre	4.18	₹ 125.00	₹ 522.50
	CARRIAGE				
0428	Sheets	tonne	1.63	₹ 110.94	₹ 180.83
	LABOUR:				
0216	Foreman	Day	3.00	₹ 425.00	₹ 1,275.00
0209	Carpenter	Day	9.000	₹ 425.00	₹ 3,825.00
0212	Helper	Day	27.00	₹ 300.00	₹ 8,100.00
0227	Painter	Day	2.50	₹ 340.00	₹ 850.00
0212	Coolie (F)	Day	5.000	₹ 300.00	₹ 1,500.00
					₹ 122,331.57
	Add for carriage of bolts, nuts, paint etc.	@	0.10%		₹ 122.33
					₹ 122,453.90
	Add for brushes for painting, sand paper, scaffolding etc.	@	0.425%		₹ 520.43
					₹ 122,974.33
	Add for hoisting arrangements including winch, pulleys, ropes etc.	@	1.00%		₹ 1,229.74
					₹ 124,204.07
	Add for Sundries and contingencies	@	3%		₹ 3,726.12
					₹ 127,930.19
	Add for contractor's profit and overheads	@	15%		₹ 19,189.53
	Cost of 0.63mm thick C.G.S. sheet roofing of area 204.867 sqm				₹ 147,119.72
	Cost per sqm				₹ 718.12
	Rate per sqm	Say			₹ 718.10

11.2	Extra for straight cutting in C.G.S. sheet roofing for making opening of area exceeding 40 sq. decimeter for chimney stacks, sky light etc. :
11.2.1	0.80mm thick

Code	Discription	Unit	Quantity	Rate	Amount
	Consider a opening of $0.70\text{m} \times 0.70\text{m} = 0.49 \text{ sqm} = 49.0 \text{ sqdm} > 40 \text{ sqdm}$ Periphery for cutting such 5 Nos. of opening = $5 \times 4 \times 0.70 = 14.0\text{m}$ Total length to be cut = 14.0m				
	LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0215	Fitter	Day	0.150	₹ 380.00	₹ 57.00
0212	Helper	Day	0.15	₹ 300.00	₹ 45.00
					₹ 165.75
	Add for Sundries and contingencies	@	3%		₹ 4.97
					₹ 170.72
	Add for contractor's profit and overheads	@	15%		₹ 25.61
	Cost of cutting 14.00m long periphery of 5 Nos. hole				₹ 196.33
	Cost per metre				₹ 14.02
	Rate per metre	Say			₹ 14.00

11.2.2	0.63mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider a opening of $0.70\text{m} \times 0.70\text{m} = 0.49 \text{ sqm} = 49.0 \text{ sqdm} > 40 \text{ sqdm}$ Periphery for cutting such 5 Nos. of opening = $5 \times 4 \times 0.70 = 14.0\text{m}$ Total length to be cut = 14.0m				
	LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0215	Fitter	Day	0.120	₹ 380.00	₹ 45.60
0212	Helper	Day	0.12	₹ 300.00	₹ 36.00
					₹ 145.35
	Add for Sundries and contingencies	@	3%		₹ 4.36
					₹ 149.71
	Add for contractor's profit and overheads	@	15%		₹ 22.46
	Cost of cutting 14.00m long periphery of 5 Nos. hole				₹ 172.17
	Cost per metre				₹ 12.30
	Rate per metre	Say			₹ 12.30

11.3	Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 square decimeter				
11.3.1	0.80mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider a opening of 0.75m dia giving an area $= 1/4(\pi \times 0.75^2) = 0.4418 \text{ sqm} = 44.18 \text{ sqdm} > 40 \text{ sqdm}$ Periphery for cutting such 5 Nos. of opening = $5 \times \pi \times 0.75 = 11.78\text{m}$ Total length to be cut = 11.78m				
	LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0215	Fitter	Day	0.220	₹ 380.00	₹ 83.60
0212	Helper	Day	0.22	₹ 300.00	₹ 66.00
					₹ 213.35
	Add for Sundries and contingencies	@	3%		₹ 6.40
					₹ 219.75

	Add for contractor's profit and overheads	@	15%		₹ 32.96
	Cost of cutting 11.78m long periphery of 5 Nos. hole				₹ 252.71
	Cost per metre				₹ 21.45
	Rate per metre	Say			₹ 21.50

11.3.2	0.63mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider a opening of 0.75m dia giving an area = $1/4(\pi \times 0.75^2) = 0.4418 \text{ sqm} = 44.18 \text{ sqdm} > 40 \text{ sqdm}$ Periphery for cutting such 5 Nos. of opening = $5 \times \pi \times 0.75 = 11.78 \text{m}$ Total length to be cut = 11.78m				
	LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0215	Fitter	Day	0.200	₹ 380.00	₹ 76.00
0212	Helper	Day	0.20	₹ 300.00	₹ 60.00
					₹ 199.75
	Add for Sundries and contingencies	@	3%		₹ 5.99
					₹ 205.74
	Add for contractor's profit and overheads	@	15%		₹ 30.86
	Cost of cutting 11.78m long periphery of 5 Nos. hole				₹ 236.60
	Cost per metre				₹ 20.08
	Rate per metre	Say			₹ 20.10

11.4	Providing ridges or hips of width 60 cm over all width plain G.S. sheet fixed with polymer coated J. or L hooks, bolts and nuts 8 mm dia. G.I. limpet and bitumen washers including a coat of approved steel primer and two coats of approved paint complete.				
11.4.1	0.80mm thick with zinc coating not less than 275gm/m ²				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider 0.8mm thick plain G.S.Sheet for ridge of 10.50m				
	MATERIALS				
11021	Sheets (Plain G.I. sheet 1.80mx0.90m will be used) No. of 60cm wide pieces in one sheet = $1.80/0.60 = 3 \text{ Nos.}$ Length of each piece = 0.9m Overlapping 20cm = 0.20m Net length of piece = 0.70m Net length from one sheet (3pieces) = $3 \times 0.70 = 2.10 \text{m}$ No. of sheets for 10.5m = $10.5/2.10 = 5 \text{ Nos. @}$ $7.03 \text{kg/sqm} = 5 \times 7.03 \times 1.8 \times 0.9 = 56.94 \text{ kg} = 0.569 \text{ q}$	q	0.569	₹ 5,235.00	₹ 2,978.72
11061	G.I. seam bolts & nuts 25x6mm - 2 in each joint. No. of joints = $15 - 1 = 14$ No. of bolts and nuts $2 \times 14 = 28$	10 Nos.	28	₹ 45.00	₹ 126.00
11018	G.I. plain washers	cent	1886	₹ 32.00	₹ 603.52
11006	Bitumen washers	cent	1886	₹ 32.00	₹ 603.52

12037	Zink chromate yellow primer	litre	0.5	₹ 70.00	₹ 35.00
11060	Ready mixed paint on new work	litre	0.35	₹ 125.00	₹ 43.75
	CARRIAGE				
0428	Sheets	tonne	0.0569	₹ 110.94	₹ 6.31
	LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0209	Carpenter	Day	0.750	₹ 425.00	₹ 318.75
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
					₹ 5,314.32
	Add for brushes for painting, sand paper, scaffolding etc.	@	2.00%		₹ 106.29
					₹ 5,420.61
	Add for hoisting arrangements including winch, pulleys, ropes etc.	@	5.00%		₹ 271.03
					₹ 5,691.64
	Add for Sundries and contingencies	@	3%		₹ 170.75
					₹ 5,862.39
	Add for contractor's profit and overheads	@	15%		₹ 879.36
	Cost of ridge with 0.80mm thick plain G.S. sheet for a length of 10.5m				₹ 6,741.75
	Cost per m				₹ 642.07
	Rate per m	Say			₹ 642.10

11.4.2	0.63mm thick with zinc coating not less than 275gm/m ²				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider 0.63mm thick plain G.S.Sheet for ridge of 10.50m				
	MATERIALS				
11021	Sheets (Plain G.I. sheet 1.80mx0.90m will be used) No. of 60cm wide pieces in one sheet = $1.80/0.60 = 3$ Nos. Length of each piece = 0.9m Overlapping 20cm = 0.20m Net length of piece = 0.70m Net length from one sheet (3pieces) = $3 \times 0.70 = 2.10$ m No. of sheets for 10.5m = $10.5/2.10 = 5$ Nos. @ 5.7kg/sqm = $5 \times 5.7 \times 1.8 \times 0.9 = 46.17$ kg = 0.4617 q	q	0.4617	₹ 5,235.00	₹ 2,417.00
11061	G.I. seam bolts & nuts 25x6mm - 2 in each joint. No. of joints = $15 - 1 = 14$ No. of bolts and nuts $2 \times 14 = 28$	10 Nos.	28	₹ 45.00	₹ 126.00
11018	G.I. plain washers	cent	1886	₹ 32.00	₹ 603.52
11006	Bitumen washers	cent	1886	₹ 32.00	₹ 603.52
12037	Zink chromate yellow primer	litre	0.5	₹ 70.00	₹ 35.00
11060	Ready mixed paint on new work	litre	0.35	₹ 125.00	₹ 43.75

	CARRIAGE				
0428	Sheets	tonne	0.04617	₹ 110.94	₹ 5.12
	LABOUR:				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0209	Carpenter	Day	0.750	₹ 425.00	₹ 318.75
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
					₹ 4,751.41
	Add for brushes for painting, sand paper, scaffolding etc.	@	2.00%		₹ 95.03
					₹ 4,846.44
	Add for hoisting arrangements including winch, pulleys, ropes etc.	@	5.00%		₹ 242.32
					₹ 5,088.76
	Add for Sundries and contingencies	@	3%		₹ 152.66
					₹ 5,241.42
	Add for contractor's profit and overheads	@	15%		₹ 786.21
	Cost of ridge with 0.63mm thick plain G.S. sheet for a length of 10.5m				₹ 6,027.63
	Cost per m				₹ 574.06
	Rate per m	Say			₹ 574.10

11.5	Providing valleys of 90cm wide overall in plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts 8mm dia. G.I. limpet and bitumen washers including a coat of approved steel primer and two coats of approved paint complete :				
11.5.1	1.60mm thick with zinc coating not less than 350gm/m ²				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider 1.60mm thick plain G.S.Sheet for 9.25m length				
	MATERIALS				
11021	4 No. sheets of (2.5mx0.9m) to be used Length 2.5x4 = 10.0m Overlaps (3x25)cms. = 0.75m Net length = 9.25m Weight 4x2.5x0.9x13.31 = 119.79 kg = 1.1979q	q	1.1979	₹ 5,235.00	₹ 6,271.01
11061	G.I. seam bolts & nuts 25x6mm - 4 in each joint. No. of bolts and nuts 3x4 = 12	10 Nos.	12	₹ 45.00	₹ 54.00
11018	G.I. plain washers	cent	12	₹ 32.00	₹ 3.84
11006	Bitumen washers	cent	12	₹ 32.00	₹ 3.84
12037	Zink chromate yellow primer	litre	0.3	₹ 70.00	₹ 21.00
11060	Ready mixed paint on new work	litre	0.45	₹ 125.00	₹ 56.25
	CARRIAGE				
0428	Sheets	tonne	0.11979	₹ 110.94	₹ 13.29
	LABOUR:				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00

0215	Fitter	Day	0.750	₹ 380.00	₹ 285.00
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
					₹ 7,328.23
	Add for brushes for painting, sand paper, scaffolding etc.	@	1.50%		₹ 109.92
					₹ 7,438.15
	Add for hoisting arrangements including winch, pulleys, ropes etc.	@	3.00%		₹ 223.14
					₹ 7,661.29
	Add for Sundries and contingencies	@	3%		₹ 229.84
					₹ 7,891.13
	Add for contractor's profit and overheads	@	15%		₹ 1,183.67
	Cost of valley with 1.60mm thick plain G.S. sheet for a length of 9.25m				₹ 9,074.80
	Cost per m				₹ 981.06
	Rate per m	Say			₹ 981.10

11.6	Providing and fixing of 40 cm over all width in plain, G.S. sheet fixed with polymer coated J, or L hooks, bolts and nuts, G.I. limpet and bitumen washer complete, bent to shape and fixed in wall with cement mortar 1:3 (1cement : 3 fine sand).				
11.6.1	1.00mm thick with zinc coating not less than 275gm/m ²				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider 1.00mm thick plain G.S.Sheet for 9.25m length Length of flashings = 9.25m				
	MATERIALS				
11021	1.00 mm thick plain G.I. sheet of (2.50x0.80) m will be used. No. of sheet required =2 Weight 2x2.50x0.80x8.60 = 34.40kg = 0.344q	q	0.344	₹ 5,235.00	₹ 1,800.84
11061	G.I. seam bolts & nuts 25x6mm - 2 in each joint.	10 Nos.	6	₹ 45.00	₹ 27.00
11018	G.I. plain washers	cent	6	₹ 32.00	₹ 1.92
11006	Bitumen washers	cent	6	₹ 32.00	₹ 1.92
12037	Zink chromate yellow primer	litre	0.2	₹ 70.00	₹ 14.00
11060	Ready mixed paint on new work	litre	0.25	₹ 125.00	₹ 31.25
	CARRIAGE				
0428	Sheets	tonne	0.0344	₹ 110.94	₹ 3.82
	LABOUR:				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0215	Fitter	Day	0.750	₹ 380.00	₹ 285.00
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
0218*	Mason	Day	0.20	₹ 400.00	₹ 80.00
					₹ 3,015.75
	Add for brushes for painting, sand paper, scaffolding, mortar 1:3 etc.	@	10.00%		₹ 301.58

					₹ 3,317.33
	Add for hoisting arrangements including winch, pulleys, ropes etc.	@	3.00%		₹ 99.52
					₹ 3,416.85
	Add for Sundries and contingencies	@	3%		₹ 102.51
					₹ 3,519.36
	Add for contractor's profit and overheads	@	15%		₹ 527.90
	Cost of flashing with 1.00mm thick plain G.S. sheet for a length of 9.25m				₹ 4,047.26
	Cost per m				₹ 437.54
	Rate per m	Say			₹ 437.50

11.7	Providing and fixing 15 cm wide 45 cm over all semi circular plain G.S. sheet gutter with iron brackets 40x3mm size, bolts, nuts and washers etc. including making necessary connections with rain water pipes complete.				
11.7.1	0.80mm thick with zinc coating not less than 275gm/m ²				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider a length of 12.70m plain G.S. sheet 0.80mm thick sheets required 18 pieces of 0.80m long (width 0.46m) = 14.40m Less overlaps 17x0.10 = 1.70m Total = 12.70m				
	MATERIALS				
11021	Out of 3 sheets of size 2.80mx0.80m we can get 18 Nos. pieces of size 0.80x0.466 m Sheets used of size 2.802x0.80m - 3 Nos. Weight 3x2.80x0.80x7.03 = 47.24kg Add 10% for wastage = 4.72 kg Total = 51.96 kg = 0.52q	q	0.52	₹ 5,235.00	₹ 2,722.20
05026	Bracket of 40mmx3mm 750mm long 19 Nos. required to support 18 sheets = 19x0.75x0.944 = 13.45kg = 0.1345q	q	0.1345	₹ 3,992.00	₹ 536.92
	Cost of manufacturing brackets, cutting and bending sheet to required shape, overlapping the same by hooking and drilling holes in brackets and sheets etc. complete	q	0.6069	₹ 750.00	₹ 455.18
11061	G.I. seam bolts & nuts 25x6mm - 3 in each bracket = 19x3 = 57 Add wastage = 3 Nos. Total = 60 Nos.	10 Nos.	60	₹ 45.00	₹ 270.00
11018	G.I. plain washers	cent	60	₹ 32.00	₹ 19.20
11006	Bitumen washers	cent	60	₹ 32.00	₹ 19.20
05027	10mmx100mm bolts to fix brackets 19x3	each	60	₹ 22.00	₹ 1,320.00
	CARRIAGE				
0428	Sheets	tonne	0.052	₹ 110.94	₹ 5.77
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0209	Carpenter	Day	1.000	₹ 425.00	₹ 425.00

0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
					₹ 6,179.72
	Add for scaffolding, carriage etc.	@	5.00%		₹ 308.99
					₹ 6,488.71
	Add for Sundries and contingencies	@	3%		₹ 194.66
					₹ 6,683.37
	Add for contractor's profit and overheads	@	15%		₹ 1,002.51
	Cost of semi-circular G.S. sheet gutter with iron brackets for 12.7m long				₹ 7,685.88
	Cost per m				₹ 605.19
	Rate per m	Say			₹ 605.20

11.7.2	0.63mm thick with zinc coating not less than 275gm/m ²				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider a length of 12.70m plain G.S. sheet 0.63mm thick sheets required 18 pieces of 0.80m long (width 0.46m) = 14.40m Less overlaps 17x0.10 = 1.70m Total = 12.70m				
	MATERIALS				
11021	Out of 3 sheets of size 2.80mx0.80m we can get 18 Nos. pieces of size 0.80x0.466 m Sheets used of size 2.802x0.80m - 3 Nos. Weight 3x2.80x0.80x5.25 = 35.28kg Add 10% for wastage = 3.52 kg Total = 38.8 kg = 0.388q	q	0.388	₹ 5,235.00	₹ 2,031.18
05026	Bracket of 40mmx3mm 750mm long 19 Nos. required to support 18 sheets = 19x0.75x0.944 = 13.45kg = 0.1345q	q	0.1345	₹ 3,992.00	₹ 536.92
	Cost of manufacturing brackets, cutting and bending sheet to required shape, overlapping the same by hooking and drilling holes in brackets and sheets etc. complete	q	0.4873	₹ 750.00	₹ 365.48
11061	G.I. seam bolts & nuts 25x6mm - 3 in each bracket = 19x3 = 57 Add wastage = 3 Nos. Total = 60 Nos.	10 Nos.	60	₹ 45.00	₹ 270.00
11018	G.I. plain washers	cent	60	₹ 32.00	₹ 19.20
11006	Bitumen washers	cent	60	₹ 32.00	₹ 19.20
05027	10mmx100mm bolts to fix brackets 19x3	each	60	₹ 22.00	₹ 1,320.00
	CARRIAGE				
0428	Sheets	tonne	0.0388	₹ 110.94	₹ 4.30
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0209	Carpenter	Day	1.000	₹ 425.00	₹ 425.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00

					₹ 5,397.53
	Add for scaffolding, carriage etc.	@	5.00%		₹ 269.88
					₹ 5,667.41
	Add for Sundries and contingencies	@	3%		₹ 170.02
					₹ 5,837.43
	Add for contractor's profit and overheads	@	15%		₹ 875.61
	Cost of semi-circular G.S. sheet gutter with iron brackets for 12.7m long				₹ 6,713.04
	Cost per m				₹ 528.59
	Rate per m	Say			₹ 528.60

11.8	Providing flat iron brackets 50x3mm size with necessary bolts, nuts and washers etc. for fixing G.S. sheets gutters with purlins.				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider providing 10 Nos. of brackets measuring 7.25m				
	MATERIALS				
05026	Bracket of 50mmx3mm 10x(225+225+75) = 5250mm 10x(125+75) = 2000mm Total = 7250mm @ 1.18kg/m = 8.555kg = 0.086q	q	0.086	₹ 3,992.00	₹ 343.31
	Cost of manufacturing brackets, cutting and bending sheet to required shape, overlapping the same by hooking and drilling holes in brackets and sheets etc. complete	q	0.086	₹ 750.00	₹ 64.50
11061	G.I. seam bolts & nuts 25x6mm = 10x2 = 20 Nos.	10 Nos.	20	₹ 45.00	₹ 90.00
11018	G.I. plain washers 2x(20+10) = 60 Nos.	cent	60	₹ 32.00	₹ 19.20
05027	10mmx125mm bolts to fix brackets 10x1 = 10 Nos	each	10	₹ 22.00	₹ 220.00
	CARRIAGE				
0428	Sheets	tonne	0.0086	₹ 110.94	₹ 0.95
					₹ 737.96
	Add for Sundries and contingencies	@	3%		₹ 22.14
					₹ 760.10
	Add for contractor's profit and overheads	@	15%		₹ 114.02
	Cost of 10 Nos. brackets for 7.25m length				₹ 874.12
	Cost per m				₹ 120.57
	Rate per m	Say			₹ 120.60

MISCELLANEOUS ROOFING WORKS

11.9	Painting top of roofs with bitumen of approved quality at 17kg per 10 sqm impregnated with a coat of fine sand at 60 cudm per 10sqm including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete :

11.9.1	With residual type petroleum bitumen of penetration 80/100				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider for painting top of roofs of 15 sqm area.				
	MATERIALS				
04011	Bitumen 80/100	tonne	0.0255	₹ 36,820.00	₹ 938.91
11016	Fuel for heating	q	0.0525	₹ -	₹ -
02004	Kerosene oil	litre	1.83	₹ 48.00	₹ 87.84
02003	Fine sand	cum	0.09	₹ 370.00	₹ 3.33
	CARRIAGE				
0472	Bitumen 80/100	tonne	0.0255	₹ 110.94	₹ 2.83
0425	Sand	cum	0.09	₹ 142.63	₹ 12.84
	LABOUR:				
0203	Belder (for all operation)	Day	0.60	₹ 300.00	₹ 180.00
0227	Painter (for spreading bitumen)	Day	0.40	₹ 340.00	₹ 136.00
					₹ 1,361.75
	Add for wire brushes and cloths for cleaning surface and brushes for painting	@	2.00%		₹ 27.24
					₹ 1,388.99
	Add for cost of use of lift to carry materials and pumps for water	@	3.00%		₹ 41.67
					₹ 1,430.66
	Add for Sundries and contingencies	@	3%		₹ 42.92
					₹ 1,473.58
	Add for contractor's profit and overheads	@	15%		₹ 221.04
	Cost of painting with residual type of petroleum bitumen for 15 sqm area				₹ 1,694.62
	Cost per sqm				₹ 112.97
	Rate per sqm	Say			₹ 113.00

11.10	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 fine sand) mixed with 2% integral water proofing compound laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 fine sand) and finished neat complete.				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider an area of 10 sqm				
	MATERIALS				
11057	Tiles	1000 Nos.	160	₹ 10,000.00	₹ 1,600.00
3.1.2	Cement mortar (1:4) for laying	cum	0.37	₹ 5,011.28	₹ 1,854.17
3.1.2	Cement mortar (1:4) for bedding	cum	0.2	₹ 5,011.28	₹ 1,002.26
04015	Integral water proofing compound	kg	0.01	₹ 36.00	₹ 0.36
	CARRIAGE				
0403	Tiles	1000 Nos.	160	₹ 199.69	₹ 31.95
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25

0219	Mason	Day	0.50	₹ 425.00	₹ 212.50
0203	Belder	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie (F)	Day	0.75	₹ 300.00	₹ 225.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
					₹ 5,392.49
	Add for charges for lift to convey materials, pumps for water etc.	@	3.00%		₹ 161.77
					₹ 5,554.26
	Add for Sundries and contingencies	@	3%		₹ 166.63
					₹ 5,720.89
	Add for Water charges	@	1%		₹ 57.21
					₹ 5,778.10
	Add for contractor's profit and overheads	@	15%		₹ 866.72
	Cost of laying pressed clay tiles for 10 sqm area				₹ 6,644.82
	Cost per sqm				₹ 664.48
	Rate per sqm	Say			₹ 664.50

11.11	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 fine sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 fine sand) and a coat of neat cement rounding the edge and making and finishing the outlet complete.				
Code	Discription	Unit	Quantity	Rate	Amount
	Consider 45x45 cm khurra 1 No.				
	MATERIALS				
4.2.3	Cement concrete 1:2:4	cum	0.01575	₹ 8,086.90	₹ 127.37
	12 thick plaster with Cement mortar (1:3) with finishing coat of neat cement 0.45x0.45 = 0.2025 sqm 4x0.45x0.05 = 0.09 sqm Total = 0.2925 sqm	sqm	0.29	₹ 164.80	₹ 47.79
11036	P.V.C sheet 400 micron	sqm	1.0	₹ 42.00	₹ 42.00
					₹ 217.16
	Add for rounding of edges	@	5.00%		₹ 10.86
	Cost of making 1 No. (45x45) cm khurra with 1:2:4 cement concrete				₹ 228.02
	Rate per Khurrah	Say			₹ 228.00

11.12	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% Ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.				

11.12.1	2mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6") as specified.				
Code	Description	Unit	Quantity	Rate	Amount
	Method of calculating the area of roof cladding <i>Calculation of effective length of roof cladding.</i> Consider a room of size 20.0m x 10.0m (outer dimensions) to be covered by fiber glass sheets. Length of the room, out to out is 20.0m. One needs projection of roof from the wall face and this projection should be as maximum as possible. For all practical purposes the sheets are covered over the full length of purlins which generally project about 250mm to 300mm from the face of the wall. However let us consider that the roof projects 250mm on both sides. Thus the effective length of the roof would be $20.0\text{m} + 2 \times 0.25\text{m} = 20.50\text{m}$ <i>Calculation of effective breadth of roof cladding.</i> Here considering the slope to be 1 Vertical to 3 Horizontal the sloping length of each side will be 5270mm. again we have to add a minimum overlap of 150mm. Also the projection which should not exceed 300mm measured as the length of sheet from the lower end to the centre of the last bolt hole of the sheet, we will maintain a projection of 250mm from the outer face of the wall. Thus the effective breadth will be $= 5.27 + 0.25 = 5.52\text{m}$ (Excluding the overlap length) Hence, the area of the roof cladding = $2 \times 20.50 \times 5.52 = 226.32 \text{ sqm}$ <i>Calculation of No. of sheets required lengthwise.</i> Length of roof = 20.50m Effective covering capacity of each sheet = 1.01m No. of sheets required per side = $20.50 / 1.01 = 20.297$ Nos. i.e. 20 Nos. full sheet a cut piece 300 mm long. <i>Calculation of No. of sheets required breadthwise:</i> The effective breadth of each side to be covered = $5.27 + 0.25 = 5.52\text{m}$ Add overlap 150mm, breadth required = $5.52 + 0.15 = 5.67\text{m}$. As the sheets are available in the length of 2.50m, 2.75m and 3.00m, we will have to combine two sheets to achieve 5.67m. This can be done by taking one sheet 3.00m long and another one 2.75m long. In this case there would be a wastage due to more overlap i.e. 230 mm as against 150mm. Hence sheets required breadthwise per slope: 1 No. 3.00m and 1 No. 2.75m <i>Area of sheets required for the entire roof:</i> $2 \times 20 \times 3.0 \times 1.05 = 126.00$ $2 \times 20 \times 2.75 \times 1.05 = 115.50$ $1 \times 3.0 \times 1.05 = 3.15$ $1 \times 2.75 \times 1.05 = 2.887$ Total = 247.537 sqm Add for wastage = 4.963 sqm Total = 252.50 sqm				
	MATERIALS				
11084	2 mm thick UV stabilised F.R.P. corrugated sheets	sqm	252.5	₹ 585.00	₹ 147,712.50
11020	Polymer coated J or L hooks with nuts Considering 2.50 Nos. per sqm, For an area of 226.32 sqm area, No. of bolts required 565.80 Nos. Wastage = 28.20 Nos. Total = 594 Nos.	10 Nos.	594	₹ 125.00	₹ 7,425.00
11017	GI Washers	cent	594	₹ 37.00	₹ 219.78
11006	Bitumen washers	cent	594	₹ 32.00	₹ 190.08
	LABOUR:				
0216	Foreman	Day	1.50	₹ 425.00	₹ 637.50
0209	Carpenter	Day	18.00	₹ 425.00	₹ 7,650.00
0212	Helper	Day	18.00	₹ 300.00	₹ 5,400.00

					₹ 169,234.86
	Add for carriage of sheets	@	0.50%		₹ 846.17
					₹ 170,081.03
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 1,275.61
					₹ 171,356.64
	Add for cat ladders or roof boards	@	0.40%		₹ 685.43
					₹ 172,042.07
	Add for Sundries and contingencies	@	3%		₹ 5,161.26
					₹ 177,203.33
	Add for contractor's profit and overheads	@	15%		₹ 26,580.50
	Cost of UV stabilised fiber glass reinforced plastic sheet roof of 226.32 sqm				₹ 203,783.83
	Cost per sqm				₹ 900.42
	Rate per sqm	Say			₹ 900.40

11.12.2	2mm thick flat				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11085	UV stabilised 2 mm thick plain FRP sheet	sqm	252.5	₹ 515.00	₹ 130,037.50
11020	Polymer coated J or L hooks with nuts Considering 2.50 Nos. per sqm, For an area of 226.32 sqm area, No. of bolts required 565.80 Nos. Wastage = 28.20 Nos. Total = 594 Nos.	10 Nos.	594	₹ 125.00	₹ 7,425.00
11017	GI Washers	cent	594	₹ 37.00	₹ 219.78
11006	Bitumen washers	cent	594	₹ 32.00	₹ 190.08
	LABOUR:				
0216	Foreman	Day	1.50	₹ 425.00	₹ 637.50
0209	Carpenter	Day	18.00	₹ 425.00	₹ 7,650.00
0212	Helper	Day	18.00	₹ 300.00	₹ 5,400.00
					₹ 151,559.86
	Add for carriage of sheets	@	0.50%		₹ 757.80
					₹ 152,317.66
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 1,142.38
					₹ 153,460.04
	Add for cat ladders or roof boards	@	0.40%		₹ 613.84
					₹ 154,073.88
	Add for Sundries and contingencies	@	3%		₹ 4,622.22
					₹ 158,696.10
	Add for contractor's profit and overheads	@	15%		₹ 23,804.42
	Cost of UV stabilised fiber glass reinforced plastic sheet roof of 226.32 sqm				₹ 182,500.52
	Cost per sqm				₹ 806.38

	Rate per sqm	Say			₹ 806.40
11.13	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11049	0.50mm thick Pre coated Galvanised Iron sheet TCT	sqm	333.27	₹ 400.00	₹ 133,308.00
11020	Polymer coated J or L hooks with nuts Considering 2.40 Nos. per sqm, For an area of 307.58 sqm area, No. of bolts required 738.19 Nos. Wastage = 36.81 Nos. Total = 775 Nos.	10 Nos.	775	₹ 125.00	₹ 9,687.50
11017	GI Washers	cent	775	₹ 37.00	₹ 286.75
11006	Bitumen washers	cent	775	₹ 32.00	₹ 248.00
	LABOUR:				
0216	Foreman	Day	3.00	₹ 425.00	₹ 1,275.00
0209	Carpenter	Day	18.00	₹ 425.00	₹ 7,650.00
0212	Helper	Day	18.00	₹ 300.00	₹ 5,400.00
					₹ 157,855.25
	Add for carriage of sheets	@	0.50%		₹ 789.28
					₹ 158,644.53
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 1,189.83
					₹ 159,834.36
	Add for cat ladders or roof boards	@	0.50%		₹ 799.17
					₹ 160,633.53
	Add for Sundries and contingencies	@	3%		₹ 4,819.01
					₹ 165,452.54
	Add for contractor's profit and overheads	@	15%		₹ 24,817.88
	Cost of Pre-painted Galvanised Iron sheet roof of 307.58 sqm				₹ 190,270.42
	Cost per sqm				₹ 618.60
	Rate per sqm	Say			₹ 618.60

11.14	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete for Ridges/Valley/Gutter/Flashing of width 600mm.				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				

11054	0.50mm thick ridge plain Length of ridge = 20.50m Add wastage = 1.50m Total = 22.0m	m	22.00	₹ 245.00	₹ 5,390.00
	Polymer coated J or L hooks with nuts : as the ridge is fixed with the same hooks used to fix the sheet no separate hooks are required				
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0209	Carpenter	Day	0.75	₹ 425.00	₹ 318.75
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
					₹ 6,265.00
	Add for carriage of sheets	@	0.50%		₹ 31.33
					₹ 6,296.33
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 47.22
					₹ 6,343.55
	Add for cat ladders or roof boards	@	0.50%		₹ 31.72
					₹ 6,375.27
	Add for Sundries and contingencies	@	3%		₹ 191.26
					₹ 6,566.53
	Add for contractor's profit and overheads	@	15%		₹ 984.98
	Cost of providing and fixing 20.5m ridges				₹ 7,551.51
	Cost per m				₹ 368.37
	Rate per m	Say			₹ 368.40

11.15	Supply & installation of pre painted Galvalume sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) in 550mpa steel grade, made out of Cold rolled steel coated with Znic-Aluminium alloy coating of 43.5% Zn, 55% Al and 1.5% Silicon confirming to ASTM A 792/A782M, ASTM A90/A90M, ASTM AS 1937, ASTM A924/A92M, Alloy coating AZ150/AZ100, colour coated with high quality polyester coating, top coated of modified polyester of 20 micron, back side coat of 5 micron, having epoxy primer coat of 5 micron on both side. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins,rafters and trusses and including cutting to size and shape wherever required.				
11.15.1	0.40mm thickness				
Code	Discription	Unit	Quantity	Rate	Amount
	Method of calculating the area of roof cladding <i>Consider a godown measuring 12x22m (outer dimensions). A slant roof is proposed with a rise of 6.0m at one end. The roof will have 250mm projections on all sides.</i> Hence, the area of covered roof = 1x22.50x13.67 = 307.58 sqm <i>Actual area of sheets to be used = 23x13.67x1.06 = 333.27 sqm</i>				
	MATERIALS				
11037	0.40mm thick Pre-painted Galvalume sheet	sqm	333.27	₹ 400.00	₹ 133,308.00

11020	Polymer coated J or L hooks with nuts Considering 2.40 Nos. per sqm, For an area of 307.58 sqm area, No. of bolts required 738.19 Nos. Wastage = 36.81 Nos. Total = 775 Nos.	10 Nos.	775	₹ 125.00	₹ 9,687.50
11017	GI Washers	cent	775	₹ 37.00	₹ 286.75
11006	Bitumen washers	cent	775	₹ 32.00	₹ 248.00
	LABOUR:				
0216	Foreman	Day	3.00	₹ 425.00	₹ 1,275.00
0209	Carpenter	Day	18.00	₹ 425.00	₹ 7,650.00
0212	Helper	Day	18.00	₹ 300.00	₹ 5,400.00
					₹ 157,855.25
	Add for carriage of sheets	@	0.50%		₹ 789.28
					₹ 158,644.53
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 1,189.83
					₹ 159,834.36
	Add for cat ladders or roof boards	@	0.50%		₹ 799.17
					₹ 160,633.53
	Add for Sundries and contingencies	@	3%		₹ 4,819.01
					₹ 165,452.54
	Add for contractor's profit and overheads	@	15%		₹ 24,817.88
	Cost of Pre-painted Galvalume Sheet roof of 307.58 sqm				₹ 190,270.42
	Cost per sqm				₹ 618.60
	Rate per sqm	Say			₹ 618.60

11.15.2	0.45mm thickness				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11038	0.45mm thick Pre-painted Galvalume sheet	sqm	333.27	₹ 430.00	₹ 143,306.10
11020	Polymer coated J or L hooks with nuts Considering 2.40 Nos. per sqm, For an area of 307.58 sqm area, No. of bolts required 738.19 Nos. Wastage = 36.81 Nos. Total = 775 Nos.	10 Nos.	775	₹ 125.00	₹ 9,687.50
11017	GI Washers	cent	775	₹ 37.00	₹ 286.75
11006	Bitumen washers	cent	775	₹ 32.00	₹ 248.00
	LABOUR:				
0216	Foreman	Day	3.00	₹ 425.00	₹ 1,275.00
0209	Carpenter	Day	18.00	₹ 425.00	₹ 7,650.00
0212	Helper	Day	18.00	₹ 300.00	₹ 5,400.00
					₹ 167,853.35
	Add for carriage of sheets	@	0.50%		₹ 839.27
					₹ 168,692.62
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 1,265.19
					₹ 169,957.81
	Add for cat ladders or roof boards	@	0.50%		₹ 849.79
					₹ 170,807.60
	Add for Sundries and contingencies	@	3%		₹ 5,124.23
					₹ 175,931.83
	Add for contractor's profit and overheads	@	15%		₹ 26,389.77
	Cost of Pre-painted Galvalume sheet roof of 307.58 sqm				₹ 202,321.60
	Cost per sqm				₹ 657.79
	Rate per sqm	Say			₹ 657.80

11.15.3	0.50mm thickness				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11039	0.50mm thick Pre-painted Galvalume sheet	sqm	333.27	₹ 515.00	₹ 171,634.05
11020	Polymer coated J or L hooks with nuts Considering 2.40 Nos. per sqm, For an area of 307.58 sqm area, No. of bolts required 738.19 Nos. Wastage = 36.81 Nos. Total = 775 Nos.	10 Nos.	775	₹ 125.00	₹ 9,687.50
11017	GI Washers	cent	775	₹ 37.00	₹ 286.75
11006	Bitumen washers	cent	775	₹ 32.00	₹ 248.00
	LABOUR:				
0216	Foreman	Day	3.00	₹ 425.00	₹ 1,275.00
0209	Carpenter	Day	18.00	₹ 425.00	₹ 7,650.00
0212	Helper	Day	18.00	₹ 300.00	₹ 5,400.00
					₹ 196,181.30
	Add for carriage of sheets	@	0.50%		₹ 980.91
					₹ 197,162.21
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 1,478.72
					₹ 198,640.93
	Add for cat ladders or roof boards	@	0.50%		₹ 993.20
					₹ 199,634.13
	Add for Sundries and contingencies	@	3%		₹ 5,989.02

					₹ 205,623.15
	Add for contractor's profit and overheads	@	15%		₹ 30,843.47
	Cost of Pre-painted Galvalume sheet roof of 307.58 sqm				₹ 236,466.62
	Cost per sqm				₹ 768.80
	Rate per sqm	Say			₹ 768.80

11.15.4	0.60mm thickness				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11040	0.60mm thick Pre-painted Galvalume sheet	sqm	333.27	₹ 610.00	₹ 203,294.70
11020	Polymer coated J or L hooks with nuts Considering 2.40 Nos. per sqm, For an area of 307.58 sqm area, No. of bolts required 738.19 Nos. Wastage = 36.81 Nos. Total = 775 Nos.	10 Nos.	775	₹ 125.00	₹ 9,687.50
11017	GI Washers	cent	775	₹ 37.00	₹ 286.75
11006	Bitumen washers	cent	775	₹ 32.00	₹ 248.00
	LABOUR:				
0216	Foreman	Day	3.00	₹ 425.00	₹ 1,275.00
0209	Carpenter	Day	18.00	₹ 425.00	₹ 7,650.00
0212	Helper	Day	18.00	₹ 300.00	₹ 5,400.00
					₹ 227,841.95
	Add for carriage of sheets	@	0.50%		₹ 1,139.21
					₹ 228,981.16
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 1,717.36
					₹ 230,698.52
	Add for cat ladders or roof boards	@	0.50%		₹ 1,153.49
					₹ 231,852.01
	Add for Sundries and contingencies	@	3%		₹ 6,955.56
					₹ 238,807.57
	Add for contractor's profit and overheads	@	15%		₹ 35,821.14
	Cost of Pre-painted Galvalume sheet roof of 307.58 sqm				₹ 274,628.71
	Cost per sqm				₹ 892.87
	Rate per sqm	Say			₹ 892.90

11.15.5	0.80mm thickness				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11041	0.80mm thick Pre-painted Galvalume sheet	sqm	333.27	₹ 812.00	₹ 270,615.24
11020	Polymer coated J or L hooks with nuts Considering 2.40 Nos. per sqm, For an area of 307.58 sqm area, No. of bolts required 738.19 Nos. Wastage = 36.81 Nos. Total = 775 Nos.	10 Nos.	775	₹ 125.00	₹ 9,687.50
11017	GI Washers	cent	775	₹ 37.00	₹ 286.75
11006	Bitumen washers	cent	775	₹ 32.00	₹ 248.00
	LABOUR:				
0216	Foreman	Day	3.00	₹ 425.00	₹ 1,275.00
0209	Carpenter	Day	18.00	₹ 425.00	₹ 7,650.00
0212	Helper	Day	18.00	₹ 300.00	₹ 5,400.00

					₹ 295,162.49
	Add for carriage of sheets	@	0.50%		₹ 1,475.81
					₹ 296,638.30
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 2,224.79
					₹ 298,863.09
	Add for cat ladders or roof boards	@	0.50%		₹ 1,494.32
					₹ 300,357.41
	Add for Sundries and contingencies	@	3%		₹ 9,010.72
					₹ 309,368.13
	Add for contractor's profit and overheads	@	15%		₹ 46,405.22
	Cost of Pre-painted Galvalume sheet roof of 307.58 sqm				₹ 355,773.35
	Cost per sqm				₹ 1,156.69
	Rate per sqm	Say			₹ 1,156.70

11.16	Supply & installation of pre painted Galvalume sheets roofing accessories in 550mpa steel grade, made out of Cold rolled steel coated with Zinc-Aluminium alloy coating of 43.5% Zn, 55% Al and 1.5% Silicon confirming to ASTM A 792/A782M, ASTM A90/A90M, ASTM A1937, ASTM A924/A92M, Alloy coating AZ150/AZ100, colour coated with high quality polyester coating, top coated of modified polyester of 20 micron, back side coat of 5 micron, having epoxy primer coat of 5 micron on both side. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation. The sheet shall be fixed using self drilling /self tapping screws with EPDM seal or with polymer coated J or L hooks, bolts and nuts G.I. seam bolts and nuts, G.I. plain and bitumen washers complete for Ridges/Valley/Gutter/Flashing of width 610mm:				
11.16.1	0.40mm thickness				
Code	Description	Unit	Quantity	Rate	Amount
	Consider roof shown as in Fig. earlier, accordingly, the length of ridge for the above roof shall be 20.50m				
	MATERIALS				
11043	0.40mm thick ridge plain Length of ridge = 20.50m Add wastage = 1.50m Total = 22.0m	m	22.00	₹ 230.00	₹ 5,060.00
	Polymer coated J or L hooks with nuts : as the ridge is fixed with the same hooks used to fix the sheet no separate hooks are required				
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0209	Carpenter	Day	0.75	₹ 425.00	₹ 318.75
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
					₹ 5,935.00
	Add for carriage of sheets	@	0.50%		₹ 29.68
					₹ 5,964.68
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 44.74
					₹ 6,009.42
	Add for cat ladders or roof boards	@	0.50%		₹ 30.05
					₹ 6,039.47
	Add for Sundries and contingencies	@	3%		₹ 181.18
					₹ 6,220.65
	Add for contractor's profit and overheads	@	15%		₹ 933.10

	Cost of providing and fixing 20.5m ridges				₹ 7,153.75
	Cost per m				₹ 348.96
	Rate per m	Say			₹ 349.00

11.16.2	0.45mm thickness				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11042	0.45mm thick ridge plain Length of ridge = 20.50m Add wastage = 1.50m Total = 22.0m	m	22.00	₹ 240.00	₹ 5,280.00
	Polymer coated J or L hooks with nuts : as the ridge is fixed with the same hooks used to fix the sheet no separate hooks are required				
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0209	Carpenter	Day	0.75	₹ 425.00	₹ 318.75
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
					₹ 6,155.00
	Add for carriage of sheets	@	0.50%		₹ 30.78
					₹ 6,185.78
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 46.39
					₹ 6,232.17
	Add for cat ladders or roof boards	@	0.50%		₹ 31.16
					₹ 6,263.33
	Add for Sundries and contingencies	@	3%		₹ 187.90
					₹ 6,451.23
	Add for contractor's profit and overheads	@	15%		₹ 967.68
	Cost of providing and fixing 20.5m ridges				₹ 7,418.91
	Cost per m				₹ 361.90
	Rate per m	Say			₹ 361.90

11.16.3	0.50mm thickness				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11044	0.50mm thick ridge plain Length of ridge = 20.50m Add wastage = 1.50m Total = 22.0m	m	22.00	₹ 282.00	₹ 6,204.00
	Polymer coated J or L hooks with nuts : as the ridge is fixed with the same hooks used to fix the sheet no separate hooks are required				
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0209	Carpenter	Day	0.75	₹ 425.00	₹ 318.75
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
					₹ 7,079.00
	Add for carriage of sheets	@	0.50%		₹ 35.40
					₹ 7,114.40
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 53.36
					₹ 7,167.76
	Add for cat ladders or roof boards	@	0.50%		₹ 35.84

					₹ 7,203.60
	Add for Sundries and contingencies	@	3%		₹ 216.11
					₹ 7,419.71
	Add for contractor's profit and overheads	@	15%		₹ 1,112.96
	Cost of providing and fixing 20.5m ridges				₹ 8,532.67
	Cost per m				₹ 416.23
	Rate per m	Say			₹ 416.20

11.16.4	0.60mm thickness				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIALS				
11045	0.60mm thick ridge plain Length of ridge = 20.50m Add wastage = 1.50m Total = 22.0m	m	22.00	₹ 340.00	₹ 7,480.00
	Polymer coated J or L hooks with nuts : as the ridge is fixed with the same hooks used to fix the sheet no separate hooks are required				
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0209	Carpenter	Day	0.75	₹ 425.00	₹ 318.75
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
					₹ 8,355.00
	Add for carriage of sheets	@	0.50%		₹ 41.78
					₹ 8,396.78
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 62.98
					₹ 8,459.76
	Add for cat ladders or roof boards	@	0.50%		₹ 42.30
					₹ 8,502.06
	Add for Sundries and contingencies	@	3%		₹ 255.06
					₹ 8,757.12
	Add for contractor's profit and overheads	@	15%		₹ 1,313.57
	Cost of providing and fixing 20.5m ridges				₹ 10,070.69
	Cost per m				₹ 491.25
	Rate per m	Say			₹ 491.30

11.16.5	0.80mm thickness				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIALS				
11046	0.80mm thick ridge plain Length of ridge = 20.50m Add wastage = 1.50m Total = 22.0m	m	22.00	₹ 434.00	₹ 9,548.00
	Polymer coated J or L hooks with nuts : as the ridge is fixed with the same hooks used to fix the sheet no separate hooks are required				
	LABOUR:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0209	Carpenter	Day	0.75	₹ 425.00	₹ 318.75
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00

					₹ 10,423.00
	Add for carriage of sheets	@	0.50%		₹ 52.12
					₹ 10,475.12
	Add for scaffolding, ropes, pulley etc.	@	0.75%		₹ 78.56
					₹ 10,553.68
	Add for cat ladders or roof boards	@	0.50%		₹ 52.77
					₹ 10,606.45
	Add for Sundries and contingencies	@	3%		₹ 318.19
					₹ 10,924.64
	Add for contractor's profit and overheads	@	15%		₹ 1,638.70
	Cost of providing and fixing 20.5m ridges				₹ 12,563.34
	Cost per m				₹ 612.85
	Rate per m	Say			₹ 612.90

CEILING WORK

11.17	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately):				
11.17.1	12 mm thick natural colour insulating board				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11031	Insulating board qty. = 10.00 sqm Add wastage = 1.00 sqm Total = 11 sqm	sqm	11.00	₹ 242.00	₹ 2,662.00
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.250	₹ 425.00	₹ 956.25
0212	Helper	Day	2.25	₹ 300.00	₹ 675.00
					₹ 4,505.75
	Add for carriage of materials, nails, putty and scaffolding	@	3.00%		₹ 135.17
					₹ 4,640.92
	Add for Sundries and contingencies	@	3%		₹ 139.23
					₹ 4,780.15
	Add for contractor's profit and overheads	@	15%		₹ 717.02
	Cost of 12mm thick Insulating board of area 10 sqm				₹ 5,497.17
	Cost per sqm				₹ 549.72
	Rate per sqm	Say			₹ 549.70

11.17.2	12 mm thick White face insulating board				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11086	Insulating board qty. = 10.00 sqm Add wastage = 1.00 sqm Total = 11 sqm	sqm	11.00	₹ 275.00	₹ 3,025.00
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.250	₹ 425.00	₹ 956.25
0212	Helper	Day	2.25	₹ 300.00	₹ 675.00
					₹ 4,868.75
	Add for carriage of materials, nails, putty and scaffolding	@	3.00%		₹ 146.06

					₹ 5,014.81
	Add for Sundries and contingencies	@	3%		₹ 150.44
					₹ 5,165.25
	Add for contractor's profit and overheads	@	15%		₹ 774.79
	Cost of 12mm thick White face insulating board of area 10 sqm				₹ 5,940.04
	Cost per sqm				₹ 594.00
	Rate per sqm	Say			₹ 594.00

11.17.3	12 mm thick Flame retardant face insulating board				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
11015	Insulating board qty. = 10.00 sqm Add wastage = 1.00 sqm Total = 11 sqm	sqm	11.00	₹ 360.00	₹ 3,960.00
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.250	₹ 425.00	₹ 956.25
0212	Helper	Day	2.25	₹ 300.00	₹ 675.00
					₹ 5,803.75
	Add for carriage of materials, nails, putty and scaffolding	@	3.00%		₹ 174.11
					₹ 5,977.86
	Add for Sundries and contingencies	@	3%		₹ 179.34
					₹ 6,157.20
	Add for contractor's profit and overheads	@	15%		₹ 923.58
	Cost of 12mm thick Flame retardant face insulating board of area 10 sqm				₹ 7,080.78
	Cost per sqm				₹ 708.08
	Rate per sqm	Say			₹ 708.10

11.18	Providing and fixing flat pressed 3 layer medium density particle board or graded particle board (Grade I) IS: 3087 marked in ceiling with necessary nails etc. complete (frame work to be paid separately):				
11.18.1	12 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
08002	Standard quality board 12mm thick qty. = 10.00 sqm Add wastage = 1.00 sqm Total = 11 sqm	sqm	11.00	₹ 364.00	₹ 4,004.00
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.250	₹ 425.00	₹ 956.25
0212	Helper	Day	2.25	₹ 300.00	₹ 675.00
					₹ 5,847.75
	Add for carriage of materials, nails, putty and scaffolding	@	3.00%		₹ 175.43
					₹ 6,023.18
	Add for Sundries and contingencies	@	3%		₹ 180.70
					₹ 6,203.88
	Add for contractor's profit and overheads	@	15%		₹ 930.58
	Cost of 12mm thick board of area 10 sqm				₹ 7,134.46

	Cost per sqm				₹ 713.45
	Rate per sqm	Say			₹ 713.50

11.19	Providing and fixing plain Multipurpose Cement board (High Pressure steam cured) as per IS : 14862 : 2000 with suitable screws for fibre cement board in ceiling etc. complete (frame work to be paid separately) :				
11.19.1	6 mm thick cement board				
Code	Discription	Unit	Quantity	Rate	Amount
	MATERIALS				
05044	Non - Asbestos multi purpose fibre cement board 6mm thick. qty. = 10.00 sqm Add wastage = 1.00 sqm Total = 11 sqm	sqm	11.00	₹ 282.00	₹ 3,102.00
	LABOUR:				
0216	Foreman	Day	0.40	₹ 425.00	₹ 170.00
0209	Carpenter	Day	1.80	₹ 425.00	₹ 765.00
0212	Helper	Day	1.80	₹ 300.00	₹ 540.00
					₹ 4,577.00
	Add for carriage of materials, nails, putty and scaffolding	@	3.00%		₹ 137.31
					₹ 4,714.31
	Add for Sundries and contingencies	@	3%		₹ 141.43
					₹ 4,855.74
	Add for contractor's profit and overheads	@	15%		₹ 728.36
	Cost of Non - Asbestos multi purpose fibre cement board 6mm thick of area 10 sqm				₹ 5,584.10
	Cost per sqm				₹ 558.41
	Rate per sqm	Say			₹ 558.40

11.20	Extra for Circular cutting and waste in ceiling with:				
11.20.1	2nd class teak wood planks 20 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering a case of providing 10 holes of 0.50m dia. The circumferential length of cutting = $10 \times \pi \times 0.50 = 15.70\text{m}$				
	MATERIALS				
08290	Material waste i.e. teak-wood = $\frac{1}{4}(10 \times \pi \times 0.50^2 \times 0.02) = 0.03927 \text{ cum} = 39.27 \text{ cu dm}$. Add wastage @ 10% = 43.197 cu dm	10 cu dm	43.20	₹ 350.00	₹ 1,511.90
	CARRIAGE				
0473	Timber	cum	0.0432	₹ 80.65	₹ 3.48
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.50	₹ 425.00	₹ 1,062.50
0212	Helper	Day	2.79	₹ 300.00	₹ 837.00
					₹ 3,627.38
	Add for scaffolding etc.	@	1.50%		₹ 54.41
					₹ 3,681.79
	Add for Sundries and contingencies	@	3%		₹ 110.45
					₹ 3,792.24
	Add for contractor's profit and overheads	@	15%		₹ 568.84
	Cost of circular cutting in ceiling for 15.70m length				₹ 4,361.08

	Cost per m				₹ 277.78
	Rate per m	Say			₹ 277.80

11.20.2	Natural colour insulating board 12 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering a case of providing 10 holes of 0.50m dia. The circumferential length of cutting = $10 \times \pi \times 0.50 = 15.70\text{m}$				
	MATERIALS				
11031	Material waste i.e.Natural colour insulating board = $1/4(10 \times \pi \times 0.50^2) = 1.9635 \text{ sqm}$. Add wastage @ 10% = 2.16 sqm	sqm	2.1600	₹ 242.00	₹ 522.72
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.50	₹ 425.00	₹ 1,062.50
0212	Helper	Day	2.79	₹ 300.00	₹ 837.00
					₹ 2,634.72
	Add for scaffolding, carriage of waste etc.	@	2.00%		₹ 52.69
					₹ 2,687.41
	Add for Sundries and contingencies	@	3%		₹ 80.62
					₹ 2,768.03
	Add for contractor's profit and overheads	@	15%		₹ 415.20
	Cost of circular cutting in ceiling for 15.70m length				₹ 3,183.23
	Cost per m				₹ 202.75
	Rate per m	Say			₹ 202.80

11.20.3	White face insulating board: 12 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering a case of providing 10 holes of 0.50m dia. The circumferential length of cutting = $10 \times \pi \times 0.50 = 15.70\text{m}$				
	MATERIALS				
11086	Material waste i.e.White face insulating board = $1/4(10 \times \pi \times 0.50^2) = 1.9635 \text{ sqm}$. Add wastage @ 10% = 2.16 sqm	sqm	2.1600	₹ 275.00	₹ 594.00
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.50	₹ 425.00	₹ 1,062.50
0212	Helper	Day	2.79	₹ 300.00	₹ 837.00
					₹ 2,706.00
	Add for scaffolding, carriage of waste etc.	@	2.00%		₹ 54.12
					₹ 2,760.12
	Add for Sundries and contingencies	@	3%		₹ 82.80
					₹ 2,842.92
	Add for contractor's profit and overheads	@	15%		₹ 426.44
	Cost of circular cutting in ceiling for 15.70m length				₹ 3,269.36
	Cost per m				₹ 208.24
	Rate per m	Say			₹ 208.20

11.20.4	Flame retardant face insulating board: 12 mm thick				

Code	Discription	Unit	Quantity	Rate	Amount
	Considering a case of providing 10 holes of 0.50m dia. The circumferential length of cutting = $10 \times \pi \times 0.50 = 15.70\text{m}$				
	MATERIALS				
11015	Material waste i.e.Flame retardant face insulating board = $1/4(10 \times \pi \times 0.50^2) = 1.9635 \text{ sqm}$. Add wastage @ 10% = 2.16 sqm	sqm	2.1600	₹ 360.00	₹ 777.60
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.50	₹ 425.00	₹ 1,062.50
0212	Helper	Day	2.79	₹ 300.00	₹ 837.00
					₹ 2,889.60
	Add for scaffolding, carriage of waste etc.	@	2.00%		₹ 57.79
					₹ 2,947.39
	Add for Sundries and contingencies	@	3%		₹ 88.42
					₹ 3,035.81
	Add for contractor's profit and overheads	@	15%		₹ 455.37
	Cost of circular cutting in ceiling for 15.70m length				₹ 3,491.18
	Cost per m				₹ 222.37
	Rate per m	Say			₹ 222.40

11.20.5	Standard quality hard board sheet: 3 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering a case of providing 10 holes of 0.50m dia. The circumferential length of cutting = $10 \times \pi \times 0.50 = 15.70\text{m}$				
	MATERIALS				
11064	Material waste i.e.Standard quality hard board sheet = $1/4(10 \times \pi \times 0.50^2) = 1.9635 \text{ sqm}$. Add wastage @ 10% = 2.16 sqm	sqm	2.1600	₹ 145.00	₹ 313.20
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.50	₹ 425.00	₹ 1,062.50
0212	Helper	Day	2.79	₹ 300.00	₹ 837.00
					₹ 2,425.20
	Add for scaffolding, carriage of waste etc.	@	2.00%		₹ 48.50
					₹ 2,473.70
	Add for Sundries and contingencies	@	3%		₹ 74.21
					₹ 2,547.91
	Add for contractor's profit and overheads	@	15%		₹ 382.19
	Cost of circular cutting in ceiling for 15.70m length				₹ 2,930.10
	Cost per m				₹ 186.63
	Rate per m	Say			₹ 186.60

11.20.6	Standard quality hard board sheet: 4.5 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering a case of providing 10 holes of 0.50m dia. The circumferential length of cutting = $10 \times \pi \times 0.50 = 15.70\text{m}$				
	MATERIALS				

11065	Material waste i.e. Standard quality hard board sheet = $1/4(10 \times 10 \times 0.50^2) = 1.9635$ sqm. Add wastage @ 10% = 2.16 sqm	sqm	2.1600	₹ 165.00	₹ 356.40
	LABOUR:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0209	Carpenter	Day	2.50	₹ 425.00	₹ 1,062.50
0212	Helper	Day	2.79	₹ 300.00	₹ 837.00
					₹ 2,468.40
	Add for scaffolding, carriage of waste etc.	@	1.50%		₹ 37.03
					₹ 2,505.43
	Add for Sundries and contingencies	@	3%		₹ 75.16
					₹ 2,580.59
	Add for contractor's profit and overheads	@	15%		₹ 387.09
	Cost of circular cutting in ceiling for 15.70m length				₹ 2,967.68
	Cost per m				₹ 189.02
	Rate per m	Say			₹ 189.00

11.21	Extra for providing and fixing ceiling to curved surfaces in narrow widths.				
Code	Discription	Unit	Quantity	Rate	Amount
	LABOUR:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0209	Carpenter	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.50	₹ 300.00	₹ 150.00
					₹ 235.00
	Add for scaffolding, carriage of materials, cost of screws and template etc.	@	1.00%		₹ 2.35
					₹ 237.35
	Add for Sundries and contingencies	@	3%		₹ 7.12
					₹ 244.47
	Add for contractor's profit and overheads	@	15%		₹ 36.67
	Extra cost of providing & fixing ceiling to curved surface of 1.5 sqm area				₹ 281.14
	Cost per sqm				₹ 187.43
	Rate per sqm	Say			₹ 187.40

11.22	Providing 10mm thick plaster of Paris (gypsum anhydrous) ceiling up to a height of 5 m above floor level over first class wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately) :				
11.22.1	Flat surfaces				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering ceiling for a room with 12 sqm area on flat surfaces				

	MATERIALS				
08281	Considering a flat surface Ceiling size = 4.0x3.0= 12 sqm I Class Wood strips 25x6mm = 86x4.0x0.025x0.006 = 0.0516 cum = 51.60cudm	10 cudm	51.60	₹ 194.00	₹ 1,001.04
12031	Plaster of Paris (Gypsum Anhydrous) As per BIS: 875 (part I) 1987, the weight of plaster with 10 mm thickness and an addition due to use of wooden or metal lathing is given as 19+6 = 25 kg/m ² Plaster of Paris (Gypsum): 4.0x3.0x25 = 300 kg Add 40% wastage = 120kg Total = 420 kg	kg	420.00	₹ 6.50	₹ 2,730.00
11087	Rabit wire mesh required for reinforcement = 4.0x3.0= 12sqm Add for wastage = 1.0sqm Total = 13.0sqm	sqm	13.00	₹ 45.00	₹ 585.00
05066	30mm long felt headed nails to fix battens 86x15 = 1290 Nos.= 0.91kg Add for wastage = 0.09kg Total = 1.0kg	kg	1.00	₹ 66.00	₹ 66.00
05066	25mm nails to fix rabbit wire mesh 86x21 = 1806 Nos.= 1.26kg	kg	1.26	₹ 66.00	₹ 83.16
	CARRIAGE				
0473	Timber	cum	0.0516	₹ 80.65	₹ 4.16
0434	Plaster of Paris	tonne	0.42	₹ 110.94	₹ 46.59
0468	Nails	tonne	1.3	₹ 110.94	₹ 144.22
	LABOUR:				
	For fixing battens and mesh				
0216	Foreman	Day	0.75	₹ 425.00	₹ 318.75
0209	Carpenter	Day	1.50	₹ 425.00	₹ 637.50
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
	For plaster of paris work				
0216	Foreman	Day	0.80	₹ 425.00	₹ 340.00
0223	Mason	Day	2.00	₹ 425.00	₹ 850.00
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
					₹ 8,516.42
	Add for scaffolding, carriage of wire mesh etc.	@	1.00%		₹ 85.16
					₹ 8,601.58
	Add for Sundries and contingencies	@	3%		₹ 258.05
					₹ 8,859.63
	Add for contractor's profit and overheads	@	15%		₹ 1,328.94
	Cost of 10mm thick plaster of paris ceiling flat surfaces of area 12 sqm				₹ 10,188.57
	Cost per sqm				₹ 849.05
	Rate per sqm	Say			₹ 849.10

11.22.2	Curved surfaces				
Code	Discription	Unit	Quantity	Rate	Amount
	Calculating the area of curved surface Consider a ceiling of a room of size 4.0mx3.0m to have a curved surface ceiling as per Fig. The surface has a raise of 500 mm in centre. Hence, the breadth of ceiling would be ABC and not AC. To find the length of the sector ABC we have = $1.50 \times 1.50 = 0.50 \times DK$; $DK = 4.50\text{m}$ or, BK (dia.) = 5.00m & BO (radius) = 2.50m $\sin \alpha = 1.50/2.50 = 0.60$; $\alpha = 3.6.86^\circ$; Angle subtended = $2\alpha = 73.73^\circ$ Noe Arc ABC = (Angle subtended by the arc at centre x Circumference of circle)/360° = $73.73 \times 2 \times \pi \times 2.5/360 = 3.217\text{m}$ Hence the area of curved surface to be covered = $1 \times 4.0 \times 3.217 = 12.868\text{sqm}$				
	MATERIALS				
08281	I Class Wood strips 25x6mm = $92 \times 4.0 \times 0.025 \times 0.006 = 0.0552$ cum = 55.20cudm	10 cudm	55.20	₹ 194.00	₹ 1,070.88
12031	Plaster of Paris (Gypsum Anhydrous) $4.0 \times 3.217 \times 25 = 321.7$ kg. Add 40% wastage = 128kg Total = 449.7 kg	kg	449.70	₹ 6.50	₹ 2,923.05
11087	Rabit wire mesh required for reinforcement = $4.0 \times 3.217 = 12.868\text{sqm}$ Add for wastage = 1.132sqm Total = 14.00sqm	sqm	14.00	₹ 45.00	₹ 630.00
05066	30mm long felt headed nails to fix battens $92 \times 15 = 1380$ Nos.= 0.9787kg Add for wastage = 0.0913kg Total = 1.07kg	kg	1.07	₹ 66.00	₹ 70.62
05066	25mm nails to fix rabbit wire mesh $92 \times 21 = 1932$ Nos.= 1.35kg	kg	1.35	₹ 66.00	₹ 89.10
	CARRIAGE				
0473	Timber	cum	0.0552	₹ 80.65	₹ 4.45
0434	Plaster of Paris	tonne	0.449	₹ 110.94	₹ 49.81
0468	Nails	tonne	0.00242	₹ 110.94	₹ 0.27
	LABOUR:				
	For fixing battens and mesh				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0209	Carpenter	Day	2.00	₹ 425.00	₹ 850.00
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
	For plaster of paris work				
0216	Foreman	Day	2.00	₹ 425.00	₹ 850.00
0223	Mason	Day	4.00	₹ 425.00	₹ 1,700.00
0203	Beldar	Day	3.50	₹ 300.00	₹ 1,050.00
0212	Coolie	Day	3.50	₹ 300.00	₹ 1,050.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
					₹ 11,423.18
	Add for scaffolding, carriage of wire mesh etc.	@	1.50%		₹ 171.35
					₹ 11,594.53
	Add for Sundries and contingencies	@	3%		₹ 347.84
					₹ 11,942.37

	Add for contractor's profit and overheads	@	15%		₹ 1,791.36
	Cost of 12mm thick plaster of paris ceiling flat surfaces of area 12 sqm				₹ 13,733.73
	Cost per sqm				₹ 1,144.48
	Rate per sqm	Say			₹ 1,144.50

11.23	Extra for any sunk or raised mouldings in the plaster of Paris (Gypsum anhydrous) ceiling.				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering a portion of 4.0 m length 0.225m width and 5mm extra thickness for excuting sunk or raised moulding				
	MATERIALS				
12031	Additional quantity of plaster of paris 4x0.225x5.61 = 5.05kg Add 50% wastage = 2.525 kg Total = 7.575 kg	kg	7.5750	₹ 6.50	₹ 49.24
	CARRIAGE				
0434	Plaster of paris	tonne	0.0075	₹ 110.94	₹ 0.83
	LABOUR:				
	Additional labour for executing moulding work				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0223	Mason	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
0205	Waterman	Day	0.10	₹ 300.00	₹ 30.00
					₹ 203.82
	Add for scaffolding, carriage of wire mesh, pumps for water etc.	@	1.50%		₹ 3.06
					₹ 206.88
	Add for Sundries and contingencies	@	3%		₹ 6.21
					₹ 213.09
	Add for contractor's profit and overheads	@	15%		₹ 31.96
	Extra cost for providing sunk or raised moulding for an area of 0.90sqm				₹ 245.05
	Cost per sqm				₹ 272.28
	Rate per sqm	Say			₹ 272.30

11.24	Extra for providing plaster of Paris (Gypsum anhydrous) ceiling above 5 metres height from floor level.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm/metre height				
	LABOUR:				
0223	Mason	Day	1.00	₹ 425.00	₹ 425.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
					₹ 800.00
	Add for scaffolding etc.	@	5.00%		₹ 40.00
					₹ 840.00
	Add for Sundries and contingencies	@	3%		₹ 25.20
					₹ 865.20
	Add for contractor's profit and overheads	@	15%		₹ 129.78
	Cost of 10 sqm per metre height				₹ 994.98
	Cost of 1 sqm per metre height				₹ 99.50
	Cost of 1 sqm per metre height	Say			₹ 99.50

11.25	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :				
11.25.1	12.5 mm thick tapered edge gypsum board conforming to IS: 2095- Part I.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10.8x9.6m = 103.68sqm.				
	MATERIALS				
11096	Gypsum board 12.5mm thick = 103.68 sqm.+ Add wastage @ 5% = 5.18sqm. Total = 108.86 sqm. 12.5 mm thick tapered edge gypsum plain board	sqm	108.86	₹ 190.00	₹ 20,683.40
11090	Galvanised Steel ceiling section (size 80x26x0.50mm)	m	238.14	₹ 53.00	₹ 12,621.42
11091	Galvanised Steel perimetre Channel (Size 20x27x30x0.50mm)	m	41.84	₹ 26.00	₹ 1,087.84
11092	Galvanised Steel intermediate Channel (Size 15x45x15x0.90mm)	m	90.72	₹ 44.00	₹ 399.17
11093	Galvanised Steel angle hanger (Celling angle) (Size 25x10x0.50mm)	m	10.80	₹ 15.00	₹ 162.00
11094	Galvanised Steel connecting clips (2.64mm dia and 230 mm long GI wire)	each	189	₹ 5.00	₹ 945.00
05029	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos.	216.00	₹ 15.00	₹ 324.00
11095	Galvanised Steel soffit cleat (Size 27x37x25x0.60mm)	each	72	₹ 4.00	₹ 288.00
11005	25mm long drive all screws	cent	1000	₹ 65.00	₹ 650.00
11029	Joint tape	Roll	1.27	₹ 115.00	₹ 146.05
11027	Joint filler	kg	22.81	₹ 30.00	₹ 684.30
11028	Joint finisher	kg	34.21	₹ 27.00	₹ 923.67
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00

11099	Primer (for gypsum board)	litre	18.66	₹ 80.00	₹ 1,492.80
	LABOUR:				
0203	Belder	Day	31.10	₹ 300.00	₹ 9,331.20
0208*	Carpenter	Day	31.10	₹ 400.00	₹ 12,441.60
0227	Painter	Day	10.37	₹ 340.00	₹ 3,525.12
					₹ 66,713.57
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 667.14
					₹ 67,380.71
	Add for carriage of materials	@	1.0%		₹ 673.81
					₹ 68,054.52
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 680.55
					₹ 68,735.07
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 1,374.70
					₹ 70,109.77
	Add for Sundries and contingencies	@	3%		₹ 2,021.42
					₹ 72,131.19
	Add for contractor's profit and overheads	@	15%		₹ 10,819.68
	Cost of 103.68 sqm false ceiling				₹ 82,950.87
	Cost per sqm				₹ 800.07
	Rate per sqm	Say			₹ 800.10

11.25.2	12.5 mm thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part I.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10.8x9.6m = 103.68sqm.				
	MATERIALS				
11100	Gypsum board 12.5mm thick = 103.68 sqm.+ Add wastage @ 5% = 5.18sqm. Total = 108.86 sqm. 12.5 mm thick tapered edge gypsum fire resistant board	sqm	108.86	₹ 287.00	₹ 31,242.82
11090	Galvanised Steel ceiling section (size 80x26x0.50mm)	m	238.14	₹ 53.00	₹ 12,621.42
11091	Galvanised Steel perimetre Channel (Size 20x27x30x0.50mm)	m	41.84	₹ 26.00	₹ 1,087.84
11092	Galvanised Steel intermediate Channel (Size 15x45x15x0.90mm)	m	90.72	₹ 44.00	₹ 399.17
11093	Galvanised Steel angle hanger (Celling angle) (Size 25x10x0.50mm)	m	10.80	₹ 15.00	₹ 162.00
11094	Galvanised Steel connecting clips (2.64mm dia and 230 mm long GI wire)	each	189	₹ 5.00	₹ 945.00
05029	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos.	216.00	₹ 15.00	₹ 324.00
11095	Galvanised Steel soffit cleat (Size 27x37x25x0.60mm)	each	72	₹ 4.00	₹ 288.00
11005	25mm long drive all screws	cent	1000	₹ 65.00	₹ 650.00
11029	Joint tape	Roll	1.27	₹ 115.00	₹ 146.05
11027	Joint filler	kg	22.81	₹ 30.00	₹ 684.30
11028	Joint finisher	kg	34.21	₹ 27.00	₹ 923.67
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
11099	Primer (for gypsum board)	litre	18.66	₹ 80.00	₹ 1,492.80

	LABOUR:				
0203	Belder	Day	31.10	₹ 300.00	₹ 9,331.20
0208*	Carpenter	Day	31.10	₹ 400.00	₹ 12,441.60
0227	Painter	Day	10.37	₹ 340.00	₹ 3,525.12
					₹ 77,272.99
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 772.73
					₹ 78,045.72
	Add for carriage of materials	@	1.0%		₹ 780.46
					₹ 78,826.18
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 788.26
					₹ 79,614.44
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 1,592.29
					₹ 81,206.73
	Add for Sundries and contingencies	@	3%		₹ 2,341.37
					₹ 83,548.10
	Add for contractor's profit and overheads	@	15%		₹ 12,532.22
	Cost of 103.68 sqm false ceiling				₹ 96,080.32
	Cost per sqm				₹ 926.70
	Rate per sqm	Say			₹ 926.70

11.25.3	12.5 mm thick tapered edge gypsum moisture resistant board.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10.8x9.6m = 103.68sqm.				
	MATERIALS				
11101	Gypsum board 12.5mm thick = 103.68 sqm.+ Add wastage @ 5% = 5.18sqm. Total = 108.86 sqm. 12.5 mm thick tapered edge gypsum moisture resistant board	sqm	108.86	₹ 320.00	₹ 34,835.20
11090	Galvanised Steel ceiling section (size 80x26x0.50mm)	m	238.14	₹ 53.00	₹ 12,621.42
11091	Galvanised Steel perimetre Channel (Size 20x27x30x0.50mm)	m	41.84	₹ 26.00	₹ 1,087.84
11092	Galvanised Steel intermediate Channel (Size 15x45x15x0.90mm)	m	90.72	₹ 44.00	₹ 399.17
11093	Galvanised Steel angle hanger (Celling angle) (Size 25x10x0.50mm)	m	10.80	₹ 15.00	₹ 162.00
11094	Galvanised Steel connecting clips (2.64mm dia and 230 mm long GI wire)	each	189	₹ 5.00	₹ 945.00
05029	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos.	216.00	₹ 15.00	₹ 324.00
11095	Galvanised Steel soffit cleat (Size 27x37x25x0.60mm)	each	72	₹ 4.00	₹ 288.00
11005	25mm long drive all screws	cent	1000	₹ 65.00	₹ 650.00
11029	Joint tape	Roll	1.27	₹ 115.00	₹ 146.05
11027	Joint filler	kg	22.81	₹ 30.00	₹ 684.30
11028	Joint finisher	kg	34.21	₹ 27.00	₹ 923.67
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
11099	Primer (for gypsum board)	litre	18.66	₹ 80.00	₹ 1,492.80

	LABOUR:				
0203	Belder	Day	31.104	₹ 300.00	₹ 9,331.20
0208*	Carpenter	Day	31.104	₹ 400.00	₹ 12,441.60
0227	Painter	Day	10.368	₹ 340.00	₹ 3,525.12
					₹ 80,865.37
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 808.65
					₹ 81,674.02
	Add for carriage of materials	@	1.0%		₹ 816.74
					₹ 82,490.76
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 824.91
					₹ 83,315.67
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 1,666.31
					₹ 84,981.98
	Add for Sundries and contingencies	@	3%		₹ 2,450.22
					₹ 87,432.20
	Add for contractor's profit and overheads	@	15%		₹ 13,114.83
	Cost of 103.68 sqm false ceiling				₹ 100,547.03
	Cost per sqm				₹ 969.78
	Rate per sqm	Say			₹ 969.80

11.25.4	Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm having approx. 15 % perforated area with perforation size and pattern as approved by the Engineer-in-charge and as per manufacturer's specification, with all 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10.8x9.6m = 103.68sqm.				
	MATERIALS				
11102	Gypsum board 12.5mm thick = 103.68 sqm.+ Add wastage @ 5% = 5.18sqm. Total = 108.86 sqm. Fully Perforated Gypsum Plaster Board	sqm	108.86	₹ 490.00	₹ 53,341.40
11090	Galvanised Steel ceiling section (size 80x26x0.50mm)	m	238.14	₹ 53.00	₹ 12,621.42
11091	Galvanised Steel perimetre Channel (Size 20x27x30x0.50mm)	m	41.84	₹ 26.00	₹ 1,087.84
11092	Galvanised Steel intermediate Channel (Size 15x45x15x0.90mm)	m	90.72	₹ 44.00	₹ 399.17
11093	Galvanised Steel angle hanger (Celling angle) (Size 25x10x0.50mm)	m	10.80	₹ 15.00	₹ 162.00
11094	Galvanised Steel connecting clips (2.64mm dia and 230 mm long GI wire)	each	189	₹ 5.00	₹ 945.00
05029	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos.	216.00	₹ 15.00	₹ 324.00
11095	Galvanised Steel soffit cleat (Size 27x37x25x0.60mm)	each	72	₹ 4.00	₹ 288.00
11005	25mm long drive all screws	cent	1000	₹ 65.00	₹ 650.00
11029	Joint tape	Roll	1.27	₹ 115.00	₹ 146.05
11027	Joint filler	kg	22.81	₹ 30.00	₹ 684.30
11028	Joint finisher	kg	34.21	₹ 27.00	₹ 923.67
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
11099	Primer (for gypsum board)	litre	18.66	₹ 80.00	₹ 1,492.80

	LABOUR:				
0203	Belder	Day	31.10	₹ 300.00	₹ 9,331.20
0208*	Carpenter	Day	31.10	₹ 400.00	₹ 12,441.60
0227	Painter	Day	10.37	₹ 340.00	₹ 3,525.12
					₹ 99,371.57
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 993.72
					₹ 100,365.29
	Add for carriage of materials	@	1.0%		₹ 1,003.65
					₹ 101,368.94
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,013.69
					₹ 102,382.63
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,047.65
					₹ 104,430.28
	Add for Sundries and contingencies	@	3%		₹ 3,010.96
					₹ 107,441.24
	Add for contractor's profit and overheads	@	15%		₹ 16,116.19
	Cost of 103.68 sqm false ceiling				₹ 123,557.43
	Cost per sqm				₹ 1,191.72
	Rate per sqm	Say			₹ 1,191.70

11.26	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				
11.26.1	GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100sqm.				
	MATERIALS				
11103	Celling Area =100 sqm Add wastage @ 5% = 5 sqm. Total=105 sqm GI Metal Tile Lay-in Plain Tegular edge global white color tiles of Size 595x595mm and 0.5 mm thick	sqm	105.00	₹ 575.00	₹ 60,375.00
11030	Main T ceiling sections 24x38x0.3 mm (3 metre long) each Including Wastage @ 10%	each	29.5	₹ 116.00	₹ 3,422.00

11033	Perimeter wall angle 24x24x0.3mm (3 metre long) each Including Wastage @ 10%	each	13.5	₹ 85.00	₹ 1,147.50
11026	Intermediate cross T-section 24x25x 0.3mm (1.2 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 39.00	₹ 5,733.00
11025	Intermediate cross T-section 24x25x 0.3mm (0.6 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 20.00	₹ 2,940.00
11023	Hanger rod 4 mm thick	each	72	₹ 10.00	₹ 720.00
11004	Adjustment clip 85x30x0.8mm	each	72	₹ 6.00	₹ 432.00
11062	Soffit cleat (Size 27x37x25x1.60mm)	each	72	₹ 5.00	₹ 360.00
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 94,237.50
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 942.38
					₹ 95,179.88
	Add for carriage of materials	@	1.0%		₹ 951.80
					₹ 96,131.68
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 961.32
					₹ 97,093.00
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 1,941.86
					₹ 99,034.86
	Add for Sundries and contingencies	@	3%		₹ 2,855.40
					₹ 101,890.26
	Add for contractor's profit and overheads	@	15%		₹ 15,283.54
	Cost of 100 sqm false ceiling				₹ 117,173.80
	Cost per sqm				₹ 1,171.74
	Rate per sqm	Say			₹ 1,171.70

11.26.2	GI Metal Ceiling Lay in perforated Tegular edge global white color tiles of size 595x595 mm and 0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100sqm.				
	MATERIALS				
11104	Celling Area =100 sqm Add wastage @ 5% = 5 sqm. Total=105 sqm GI Metal Tile Lay-in Perforated Tegular edge global white color tiles of Size 595x595mm and 0.5 mm thick	sqm	105.00	₹ 675.00	₹ 70,875.00
11030	Main T ceiling sections 24x38x0.3 mm (3 metre long) each Including Wastage @ 10%	each	29.5	₹ 116.00	₹ 3,422.00
11033	Perimeter wall angle 24x24x0.3mm (3 metre long) each Including Wastage @ 10%	each	13.5	₹ 85.00	₹ 1,147.50

11026	Intermediate cross T-section 24x25x 0.3mm (1.2 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 39.00	₹ 5,733.00
11025	Intermediate cross T-section 24x25x 0.3mm (0.6 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 20.00	₹ 2,940.00
11023	Hanger rod 4 mm thick	each	72	₹ 10.00	₹ 720.00
11004	Adjustment clip 85x30x0.8mm	each	72	₹ 6.00	₹ 432.00
11062	Soffit cleat (Size 27x37x25x1.60mm)	each	72	₹ 5.00	₹ 360.00
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 104,737.50
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,047.38
					₹ 105,784.88
	Add for carriage of materials	@	1.0%		₹ 1,057.85
					₹ 106,842.73
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,068.43
					₹ 107,911.16
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,158.22
					₹ 110,069.38
	Add for Sundries and contingencies	@	3%		₹ 3,173.55
					₹ 113,242.93
	Add for contractor's profit and overheads	@	15%		₹ 16,986.44
	Cost of 100 sqm false ceiling				₹ 130,229.37
	Cost per sqm				₹ 1,302.29
	Rate per sqm	Say			₹ 1,302.30

11.26.3	12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595x595 mm, made of Gypsum plasterboard, manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16mm thick fire retardant PVC film on the face side and 12micron metalized polyester on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyester film so as to make the tile a completely sealed unit.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100sqm.				
	MATERIALS				
11105	Celling Area =100 sqm Add wastage @ 5% = 5 sqm. Total=105 sqm PVC Laminated Gypsum Tiles (Square edge) of Size 595x595 mm and 12.5 mm thick	sqm	105.00	₹ 515.00	₹ 54,075.00
11030	Main T ceiling sections 24x38x0.3 mm (3 metre long) each Including Wastage @ 10%	each	29.5	₹ 116.00	₹ 3,422.00
11033	Perimeter wall angle 24x24x0.3mm (3 metre long) each Including Wastage @ 10%	each	13.5	₹ 85.00	₹ 1,147.50
11026	Intermediate cross T-section 24x25x 0.3mm (1.2 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 39.00	₹ 5,733.00
11025	Intermediate cross T-section 24x25x 0.3mm (0.6 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 20.00	₹ 2,940.00

11023	Hanger rod 4 mm thick	each	72	₹ 10.00	₹ 720.00
11004	Adjustment clip 85x30x0.8mm	each	72	₹ 6.00	₹ 432.00
11062	Soffit cleat (Size 27x37x25x1.60mm)	each	72	₹ 5.00	₹ 360.00
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 87,937.50
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 879.38
					₹ 88,816.88
	Add for carriage of materials	@	1.0%		₹ 888.17
					₹ 89,705.05
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 897.05
					₹ 90,602.10
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 1,812.04
					₹ 92,414.14
	Add for Sundries and contingencies	@	3%		₹ 2,664.51
					₹ 95,078.65
	Add for contractor's profit and overheads	@	15%		₹ 14,261.80
	Cost of 100 sqm false ceiling				₹ 109,340.45
	Cost per sqm				₹ 1,093.40
	Rate per sqm	Say			₹ 1,093.40

11.26.4	12.5 mm thick fully Perforated Gypsum Board tile made from plasterboard having glass fibre conforming to IS: 2095 part I, of size 595x595 mm, having perforation of 9.7x9.7 mm at 19.4 mm c/c with center borders of 48 mm and the side borders of 30 mm, backed with non woven tissue on the back side, having an NRC (Noise Reduction Coefficient) of 0.79, with 50 mm resin bonded glass wool backing.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100sqm.				
	MATERIALS				
11106	Celling Area =100 sqm Add wastage @ 5% = 5 sqm. Total=105 sqm Gypsum Tiles Fully Perforated Square edge of Size 595x595 mm and 12.5 mm thick	sqm	105.00	₹ 540.00	₹ 56,700.00
11030	Main T ceiling sections 24x38x0.3 mm (3 metre long) each Including Wastage @ 10%	each	29.5	₹ 116.00	₹ 3,422.00
11033	Perimeter wall angle 24x24x0.3mm (3 metre long) each Including Wastage @ 10%	each	13.5	₹ 85.00	₹ 1,147.50
11026	Intermediate cross T-section 24x25x 0.3mm (1.2 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 39.00	₹ 5,733.00
11025	Intermediate cross T-section 24x25x 0.3mm (0.6 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 20.00	₹ 2,940.00
11023	Hanger rod 4 mm thick	each	72	₹ 10.00	₹ 720.00
11004	Adjustment clip 85x30x0.8mm	each	72	₹ 6.00	₹ 432.00
11062	Soffit cleat (Size 27x37x25x1.60mm)	each	72	₹ 5.00	₹ 360.00
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00

					₹ 90,562.50
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 905.63
					₹ 91,468.13
	Add for carriage of materials	@	1.0%		₹ 914.68
					₹ 92,382.81
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 923.83
					₹ 93,306.64
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 1,866.13
					₹ 95,172.77
	Add for Sundries and contingencies	@	3%		₹ 2,744.04
					₹ 97,916.81
	Add for contractor's profit and overheads	@	15%		₹ 14,687.52
	Cost of 100 sqm false ceiling				₹ 112,604.33
	Cost per sqm				₹ 1,126.04
	Rate per sqm	Say			₹ 1,126.00

11.27	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T', bottom exposed with 24 mm of all Tsections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge.
	Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/ opening (cut outs) having area less than 0.30 sqm.The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%, non-combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/mK

Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100sqm.				
	MATERIALS				
11107	Celling Area =100 sqm Add wastage @ 5% = 5 sqm. Total=105 sqm Calcium Silicate tegular edged ceiling tiles 595x595 mm and 15 mm thick	sqm	105.00	₹ 935.00	₹ 98,175.00
11030	Main T ceiling sections 24x38x0.3 mm (3 metre long) each Including Wastage @ 10%	each	29.5	₹ 116.00	₹ 3,422.00
11033	Perimeter wall angle 24x24x0.3mm (3 metre long) each Including Wastage @ 10%	each	13.5	₹ 85.00	₹ 1,147.50
11026	Intermediate cross T-section 24x25x 0.3mm (1.2 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 39.00	₹ 5,733.00
11025	Intermediate cross T-section 24x25x 0.3mm (0.6 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 20.00	₹ 2,940.00
11023	Hanger rod 4 mm thick	each	72	₹ 10.00	₹ 720.00
11004	Adjustment clip 85x30x0.8mm	each	72	₹ 6.00	₹ 432.00
11062	Soffit cleat (Size 27x37x25x1.60mm)	each	72	₹ 5.00	₹ 360.00
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
05050	Wooden screws with plastic rawl plugs 35x8 m	each	50	₹ 7.00	₹ 350.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 132,387.50
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,323.88
					₹ 133,711.38
	Add for carriage of materials	@	1.0%		₹ 1,337.11
					₹ 135,048.49
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,350.48
					₹ 136,398.97
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,727.98
					₹ 139,126.95
	Add for Sundries and contingencies	@	3%		₹ 4,011.34
					₹ 143,138.29
	Add for contractor's profit and overheads	@	15%		₹ 21,470.74
	Cost of 100 sqm false ceiling				₹ 164,609.03
	Cost per sqm				₹ 1,646.09
	Rate per sqm	Say			₹ 1,646.10

11.28	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on interlocking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanized butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				
11.28.1	8 mm thick fully perforated calcium silicate board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with minimum compressive strength 225 kg/ sq. cm, bending strength 100 kg/sq. cm, of size 595x595 mm, having perforation of dia. 10 mm with minimum perforated area 18 % with non woven tissue on the back side, having an NRC (Noise Reduction Coefficient) of 0.85, with 50 mm thick rockwool of 48 kg /cum backing.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100sqm.				
	MATERIALS				
11108	Celling Area =100 sqm Add wastage @ 5% = 5 sqm. Total=105 sqm 8mm thick Calcium silicate perforated tiles of size 595 x595mm	sqm	105.00	₹ 735.00	₹ 77,175.00
11030	Main T ceiling sections 24x38x0.3 mm (3 metre long) each Including Wastage @ 10%	each	29.5	₹ 116.00	₹ 3,422.00
11033	Perimeter wall angle 24x24x0.3mm (3 metre long) each Including Wastage @ 10%	each	13.5	₹ 85.00	₹ 1,147.50
11026	Intermediate cross T-section 24x25x 0.3mm (1.2 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 39.00	₹ 5,733.00
11025	Intermediate cross T-section 24x25x 0.3mm (0.6 mtrs long) each Including Wastage @ 10% on Grid for cut outs	each	147.0	₹ 20.00	₹ 2,940.00
11023	Hanger rod 4 mm thick	each	72	₹ 10.00	₹ 720.00
11004	Adjustment clip 85x30x0.8mm	each	72	₹ 6.00	₹ 432.00
11062	Soffit cleat (Size 27x37x25x1.60mm)	each	72	₹ 5.00	₹ 360.00
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 111,037.50
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,110.38
					₹ 112,147.88
	Add for carriage of materials	@	1.0%		₹ 1,121.48
					₹ 113,269.36

	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,132.69
					₹ 114,402.05
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,288.04
					₹ 116,690.09
	Add for Sundries and contingencies	@	3%		₹ 3,364.44
					₹ 120,054.53
	Add for contractor's profit and overheads	@	15%		₹ 18,008.18
	Cost of 100 sqm false ceiling				₹ 138,062.71
	Cost per sqm				₹ 1,380.63
	Rate per sqm	Say			₹ 1,380.60

11.29	Providing & fixing false ceiling at all height including providing & fixing of framework made of special section, power pressed from M.S. sheets and galvanised with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleat of size 25mm wide x 1.6mm thick with flanges of 27mm and 37mm, at 1200mm c/c, one flange fixed to the ceiling with dash fastener 12.5mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25 x10 x0.50mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I chanel 45 x15 x 0.90mm running at the spacing of 1200 mm c/ c, to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having lips of 10.5mm, at 450mm c/c, shall be fixed in a direction perpendicular to G.I intermediate channel with connecting clip made out of 2.64mm dia x 230mm long G.I wire at every junction, including fixing perimeter channels 0.50mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/partitions with the help of Rawl plugs at 450mm centre, with 25mm long dry wall screws @ 230mm interval, including fixing of Calcium Silicate Board to ceiling section and perimeter channels with the help of dry wall screws of size 3.5 x25mm at 230mm c/c, including jointing & finishing to a flush finish of tapered and square edges of the board with recommended jointing compounds, jointing tapes,finishing with jointing compounds in three layers covering up to 150mm on both sides of joints and two coats of primer suitable for boards, all as per manufacture's specification and also including the cost of making opening for light fittings, grills, diffusers, cut outs made with frame of perimeter channels suitably fixed, all complete as per drawings, specificaton and direction of the Engineer in charge but excluding the cost of painting with:				
11.29.1	8 mm thick Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10.8x9.6m = 103.68sqm.				
	MATERIALS				
11109	Calcium silicate board = 103.68 sqm.+ Add wastage @ 5% = 5.18sqm. Total = 108.86 sqm. 8 mm thick tapered edge calcium silicate board	sqm	108.86	₹ 285.00	₹ 31,025.10
11090	Galvanised Steel ceiling section (size 80x26x0.50mm)	m	238.14	₹ 53.00	₹ 12,621.42
11091	Galvanised Steel perimetre Channel (Size 20x27x30x0.50mm)	m	41.84	₹ 26.00	₹ 1,087.84
11092	Galvanised Steel intermediate Channel (Size 15x45x15x0.90mm)	m	90.72	₹ 44.00	₹ 399.17
11093	Galvanised Steel angle hanger (Celling angle) (Size 25x10x0.50mm)	m	10.80	₹ 15.00	₹ 162.00

11094	Galvanised Steel connecting clips (2.64mm dia and 230 mm long GI wire)	each	189	₹ 5.00	₹ 945.00
05029	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos.	216.00	₹ 15.00	₹ 324.00
11095	Galvanised Steel soffit cleat (Size 27x37x25x0.60mm)	each	72	₹ 4.00	₹ 288.00
11005	25mm long drive all screws	cent	1000	₹ 65.00	₹ 650.00
11029	Joint tape	Roll	1.27	₹ 115.00	₹ 146.05
11027	Joint filler	kg	22.81	₹ 30.00	₹ 684.30
11028	Joint finisher	kg	34.21	₹ 27.00	₹ 923.67
11012	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	72	₹ 14.00	₹ 1,008.00
11099	Primer (for gypsum board)	litre	18.66	₹ 80.00	₹ 1,492.80
	LABOUR:				
0203	Belder	Day	31.10	₹ 300.00	₹ 9,331.20
0208*	Carpenter	Day	31.10	₹ 400.00	₹ 12,441.60
0227	Painter	Day	10.37	₹ 340.00	₹ 3,525.12
					₹ 77,055.27
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 770.55
					₹ 77,825.82
	Add for carriage of materials	@	1.0%		₹ 778.26
					₹ 78,604.08
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 786.04
					₹ 79,390.12
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 1,587.80
					₹ 80,977.92
	Add for Sundries and contingencies	@	3%		₹ 2,334.77
					₹ 83,312.69
	Add for contractor's profit and overheads	@	15%		₹ 12,496.90
	Cost of 103.68 sqm false ceiling				₹ 95,809.59
	Cost per sqm				₹ 924.09
	Rate per sqm	Say			₹ 924.10

11.30	Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 & 7), humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 1200 mm and secondary intermediate cross-T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge.				
11.30.1	With 15 mm thick tegular edged light weight calcium silicate false ceiling tiles.				
Code	Discription	Unit	Quantity	Rate	Amount

	Details of cost for 100 sqm				
	MATERIALS				
11107	Calcium Silicate tegular edged ceiling tiles 595x595 mm and 15 mm thick Ceiling Area = 100 sqm + Add 5% wastage = 5 sqm Total = 105 sqm	sqm	105.00	₹ 935.00	₹ 98,175.00
11030	Galvanised iron main Tee ceiling section Size 24x38x0.33 mm (3 metre long) each including wastage @10%	each	29.50	₹ 116.00	₹ 3,422.00
11033	Galvanised iron perimeter wall Angle Size 24 x 24 x 0.40 mm (3.00 metre long) each including wastage @10%	each	13.50	₹ 85.00	₹ 1,147.50
11026	Galvanised iron intermediate cross T section Size 24 x 32 x 0.33 mm (1.2 metre long) each including wastage @10%	each	147.00	₹ 39.00	₹ 573.30
11025	Galvanised iron intermediate cross T section Size 24 x 32 x 0.33 mm (0.6 metre long) each including wastage @10%	each	147.00	₹ 20.00	₹ 2,940.00
11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	72	₹ 28.00	₹ 201.60
11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	72	₹ 16.00	₹ 1,152.00
11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	72	₹ 35.00	₹ 2,520.00
11114	40 mm long S.S screws with plastic rawl plugs	each	100.00	₹ 3.50	₹ 350.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 128,581.40
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,285.81
					₹ 129,867.21
	Add for carriage of materials	@	1.0%		₹ 1,298.67
					₹ 131,165.88
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,311.66
					₹ 132,477.54
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,649.55
					₹ 135,127.09
	Add for Sundries and contingencies	@	3%		₹ 3,896.02
					₹ 139,023.11
	Add for contractor's profit and overheads	@	15%		₹ 20,853.47
	Cost of 100 sqm false ceiling				₹ 159,876.58
	Cost per sqm				₹ 1,598.77
	Rate per sqm	Say			₹ 1,598.80

11.31	Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 & 7), humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal powder coated T-Grid of hot dipped galvanised iron section of 0.40 mm thick on Silhouette profile, rotary stitched double webbed white with 6 mm reveal profile (white/black), comprising of main-T runners of size 15x42 mm of length 3000 mm, cross - T of size 15x42 mm of length 1200 mm and secondary intermediate cross-T of size 15x42 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 22x19x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge.				
11.31.1	With 15 mm thick integral densified micro edge light weight calcium silicate false ceiling tiles				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm				
	MATERIALS				
11110	15 mm thick, light weight, integral densified micro look edged, false ceiling tiles of size 595x595 mm. Ceiling Area = 100 sqm + Add 5% wastage = 5 sqm Total = 105 sqm	sqm	105.00	₹ 990.00	₹ 103,950.00
11115	Powder coated steel section main-T ceiling sections 15x42x0.40 mm (3000 mm long) including wastage @10%	each	29.50	₹ 248.00	₹ 7,316.00
11116	Galvanized mild steel perimeter wall angle 22x19x0.40 mm (3000 mm long) including wastage @10%	each	13.50	₹ 121.00	₹ 1,633.50
11117	Powder coated Galvanised Iron intermediate cross-T section 15x42x0.40 mm (1200 mm long) including wastage @10%	each	147.00	₹ 100.00	₹ 1,470.00
11118	Powder coated Galvanized Iron intermediate cross-T section 15x42x0.40mm (600 mm long) including wastage @10%	each	147.00	₹ 50.00	₹ 7,350.00
11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	72	₹ 28.00	₹ 201.60
11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	72	₹ 16.00	₹ 1,152.00
11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	72	₹ 35.00	₹ 2,520.00
11114	40 mm long S.S screws with plastic rawl plugs	each	100.00	₹ 3.50	₹ 350.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 144,043.10
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,440.43
					₹ 145,483.53
	Add for carriage of materials	@	1.0%		₹ 1,454.84

					₹ 146,938.37
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,469.38
					₹ 148,407.75
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,968.16
					₹ 151,375.91
	Add for Sundries and contingencies	@	3%		₹ 4,364.51
					₹ 155,740.42
	Add for contractor's profit and overheads	@	15%		₹ 23,361.06
	Cost of 100 sqm false ceiling				₹ 179,101.48
	Cost per sqm				₹ 1,791.01
	Rate per sqm	Say			₹ 1,791.00

11.32	Providing & fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having moisture content less than 2%, humidity resistance of 99%, NRC0.50 to 0.75 as per IS 8225:1987, Non combustible as per BS 476 (part 4)-1970 and light reflectance of 85% (minimum) to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 15x32 mm of length 3000 mm, cross - T of size 15x32 mm of length 1200 mm and secondary intermediate cross-T of size 15x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall wood screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge.				
11.32.1	With semi perforated 12 mm thick micro tegular edged GRG false ceiling tiles.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm				
	MATERIALS				
11123	12 mm thick micro tegular edged semi perforated GFRG (Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x 595 mm Celling Area = 100 sqm + Add 5% wastage = 5 sqm Total = 105 sqm	sqm	105.00	₹ 692.00	₹ 72,660.00
11120	Galvanized iron main-T ceiling sections 15x32x0.33 mm (3000 mm long) Including wastage @ 10%	each	29.50	₹ 208.00	₹ 6,136.00
11033	Galvanized iron perimeter wall angle 24x24x0.40 mm (3000 mm long) Including wastage @ 10%	each	13.50	₹ 85.00	₹ 1,147.50
11121	Galvanized iron intermediate crossT section 15x32x0.33 mm (1200 mm long) Including wastage @ 10%	each	147.00	₹ 85.00	₹ 1,249.50
11122	Galvanized iron intermediate crossT section 15x32x0.33 mm (600 mm long) Including wastage @ 10	each	147.00	₹ 38.00	₹ 5,586.00
11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	72	₹ 28.00	₹ 201.60
11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	72	₹ 16.00	₹ 1,152.00

11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	72	₹ 35.00	₹ 2,520.00
11114	40 mm long S.S screws with plastic rawl plugs	each	100.00	₹ 3.50	₹ 350.00
	LABOUR:			₹ -	
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 109,102.60
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,091.03
					₹ 110,193.63
	Add for carriage of materials	@	1.0%		₹ 1,101.94
					₹ 111,295.57
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,112.96
					₹ 112,408.53
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,248.17
					₹ 114,656.70
	Add for Sundries and contingencies	@	3%		₹ 3,305.81
					₹ 117,962.51
	Add for contractor's profit and overheads	@	15%		₹ 17,694.38
	Cost of 100 sqm false ceiling				₹ 135,656.89
	Cost per sqm				₹ 1,356.57
	Rate per sqm	Say			₹ 1,356.60

11.32.2	With fully perforated 12 mm thick micro tegular edged or 10 mm thick square edged GRG false ceiling tiles.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm				
	MATERIALS				
11124	12 mm thick micro tegular edged fully perforated GFRG (Glass Fibre Reinforced Gypsum) false celing tiles of Size 595x 595 mm Ceiling Area = 100 sqm + Add 5% wastage = 5 sqm Total = 105 sqm	sqm	105.00	₹ 780.00	₹ 81,900.00
11120	Galvanized iron main-T ceiling sections 15x32x0.33 mm (3000 mm long) Including wastage @ 10%	each	29.50	₹ 208.00	₹ 6,136.00
11033	Galvanized iron perimeter wall angle 24x24x0.40 mm (3000 mm long) Including wastage @ 10%	each	13.50	₹ 85.00	₹ 1,147.50
11121	Galvanized iron intermediate crossT section 15x32x0.33 mm (1200 mm long) Including wastage @ 10%	each	147.00	₹ 85.00	₹ 1,249.50
11122	Galvanized iron intermediate crossT section 15x32x0.33 mm (600 mm long) Including wastage @ 10	each	147.00	₹ 38.00	₹ 5,586.00
11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	72	₹ 28.00	₹ 201.60
11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	72	₹ 16.00	₹ 1,152.00
11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	72	₹ 35.00	₹ 2,520.00
11114	40 mm long S.S screws with plastic rawl plugs	each	100.00	₹ 3.50	₹ 350.00

	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 118,342.60
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,183.43
					₹ 119,526.03
	Add for carriage of materials	@	1.0%		₹ 1,195.26
					₹ 120,721.29
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,207.21
					₹ 121,928.50
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,438.57
					₹ 124,367.07
	Add for Sundries and contingencies	@	3%		₹ 3,585.78
					₹ 127,952.85
	Add for contractor's profit and overheads	@	15%		₹ 19,192.93
	Cost of 100 sqm false ceiling				₹ 147,145.78
	Cost per sqm				₹ 1,471.46
	Rate per sqm	Say			₹ 1,471.50

11.33	Providing and fixing mineral fibre false ceiling tiles at all heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance ?85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 &7) in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the Engineer-in-charge.				
11.33.1	With 16 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.55 to 0.6).				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm				
	MATERIALS				
11125	Mineral fibre beveled tegular edged ceiling tiles 595x595 mm, 16 mm thick Ceiling Area = 100 sqm + Add 5% wastage = 5 sqm Total = 105 sqm	sqm	105.00	₹ 865.00	₹ 90,825.00
11120	G.I. main runner 15X32mm of 3000 mm length, 0.33mm thick including 10 % wastage	each	29.50	₹ 208.00	₹ 6,136.00
11033	Galvanized iron perimeter wall angle 24x24x0.40 mm (3000 mm long) Including wastage @ 10%	each	13.50	₹ 85.00	₹ 1,147.50

11121	G.I. cross Tee 15X32mm of 1200mm length 0.33mm thick including 10 % wastage	each	147.00	₹ 85.00	₹ 1,249.50
11122	G.I. cross Tee 15X32mm of 600mm length, 0.33 mm thick including 10 % wastage	each	147.00	₹ 38.00	₹ 5,586.00
11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	72	₹ 28.00	₹ 201.60
11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	72	₹ 16.00	₹ 1,152.00
11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	72	₹ 35.00	₹ 2,520.00
11114	40 mm long S.S screws with plastic rawl plugs	each	100.00	₹ 3.50	₹ 350.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 127,267.60
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,272.68
					₹ 128,540.28
	Add for carriage of materials	@	1.0%		₹ 1,285.40
					₹ 129,825.68
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,298.26
					₹ 131,123.94
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,622.48
					₹ 133,746.42
	Add for Sundries and contingencies	@	3%		₹ 3,856.21
					₹ 137,602.63
	Add for contractor's profit and overheads	@	15%		₹ 20,640.39
	Cost of 100 sqm false ceiling				₹ 158,243.02
	Cost per sqm				₹ 1,582.43
	Rate per sqm	Say			₹ 1,582.40

11.33.2	With 20 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.7).				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm				
	MATERIALS				
11126	20 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.7) Ceiling Area = 100 sqm + Add 5% wastage = 5 sqm Total = 105 sqm	sqm	105.00	₹ 1,095.00	₹ 114,975.00
11120	Galvanized iron main-T ceiling sections 15x32x0.33 mm (3000 mm long) Including wastage @ 10%	each	29.50	₹ 208.00	₹ 6,136.00
11033	Galvanized iron perimeter wall angle 24x24x0.40 mm (3000 mm long) Including wastage @ 10%	each	13.50	₹ 85.00	₹ 1,147.50
11121	Galvanized iron intermediate crossT section 15x32x0.33 mm (1200 mm long) Including wastage @ 10%	each	147.00	₹ 85.00	₹ 1,249.50
11122	Galvanized iron intermediate crossT section 15x32x0.33 mm (600 mm long) Including wastage @ 10	each	147.00	₹ 38.00	₹ 5,586.00

11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	72	₹ 28.00	₹ 201.60
11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	72	₹ 16.00	₹ 1,152.00
11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	72	₹ 35.00	₹ 2,520.00
11114	40 mm long S.S screws with plastic rawl plugs	each	100.00	₹ 3.50	₹ 350.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 151,417.60
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,514.18
					₹ 152,931.78
	Add for carriage of materials	@	1.0%		₹ 1,529.32
					₹ 154,461.10
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,544.61
					₹ 156,005.71
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 3,120.11
					₹ 159,125.82
	Add for Sundries and contingencies	@	3%		₹ 4,587.95
					₹ 163,713.77
	Add for contractor's profit and overheads	@	15%		₹ 24,557.07
	Cost of 100 sqm false ceiling				₹ 188,270.84
	Cost per sqm				₹ 1,882.71
	Rate per sqm	Say			₹ 1,882.70

11.33.3	With 16 mm thick beveled tegular mineral fibre Anti-microbial false ceiling tile confirming to ISO 5 (class 100) specifications.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 100 sqm				
	MATERIALS				
11127	Mineral fibre beveled tegular edged ceiling tiles 595x595 mm, 16 mm thick with bioblock, confirming to ISO 5 (class 100) specifications Celling Area = 100 sqm + Add 5% wastage = 5 sqm Total = 105 sqm	sqm	105.00	₹ 945.00	₹ 99,225.00
11120	Galvanized iron main-T ceiling sections 15x32x0.33 mm (3000 mm long) Including wastage @ 10%	each	29.50	₹ 208.00	₹ 6,136.00
11033	Galvanized iron perimeter wall angle 24x24x0.40 mm (3000 mm long) Including wastage @ 10%	each	13.50	₹ 85.00	₹ 1,147.50
11121	Galvanized iron intermediate crossT section 15x32x0.33 mm (1200 mm long) Including wastage @ 10%	each	147.00	₹ 85.00	₹ 1,249.50
11122	Galvanized iron intermediate crossT section 15x32x0.33 mm (600 mm long) Including wastage @ 10	each	147.00	₹ 38.00	₹ 5,586.00
11111	Galavanised MS hanger rod 6 mm dia MS fully threaded up to 1000 mm length	each	72	₹ 28.00	₹ 201.60

11112	Galavanised MS L-shape level adjuster of size 85x25x2 mm	each	72	₹ 16.00	₹ 1,152.00
11113	Galavanised MS 8 mm outer diameter M-6 dash fastener 50mm long	each	72	₹ 35.00	₹ 2,520.00
11114	40 mm long S.S screws with plastic rawl plugs	each	100.00	₹ 3.50	₹ 350.00
	LABOUR:				
0203	Belder	Day	23.00	₹ 300.00	₹ 6,900.00
0208*	Carpenter	Day	28.00	₹ 400.00	₹ 11,200.00
					₹ 135,667.60
	Add for scaffolding, rassi, coir ropes, preparing cleats etc.	@	1.00%		₹ 1,356.68
					₹ 137,024.28
	Add for carriage of materials	@	1.0%		₹ 1,370.24
					₹ 138,394.52
	Add for frames with perimeter channels for opening etc.	@	1%		₹ 1,383.95
					₹ 139,778.47
	Add for cost of operating lifts, welding machines etc.	@	2%		₹ 2,795.57
					₹ 142,574.04
	Add for Sundries and contingencies	@	3%		₹ 4,110.73
					₹ 146,684.77
	Add for contractor's profit and overheads	@	15%		₹ 22,002.72
	Cost of 100 sqm false ceiling				₹ 168,687.49
	Cost per sqm				₹ 1,686.87
	Rate per sqm	Say			₹ 1,686.90

THERMAL INSULATION WORK

11.34	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Fibre glass wool conforming to IS : 8193 density 24kg/m ³ , 50mm thick, wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5mm x 24g wire and mesh, for top most ceiling of building.				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering the work of thermal insulation of ceiling of size 3.60mx4.20m = 15.12sqm				
	MATERIALS				
11059	Resin bonded fibre glass wool: 50mm thick 1x3.60x4.20 = 15.12 sqm Add wastage = 0.38 sqm Total = 15.50 sqm	sqm	15.50	₹ 160.00	₹ 2,480.00
11002	200G virgin polythene sheet to prepare bags 1x3.60x4.20 = 15.12 sqm Add wastage and for wrapping = 1.88 sqm Total = 17.00sqm	sqm	17.00	₹ 6.00	₹ 102.00
11062	50x50x3 mm Metallic Cleats 2x7x8 = 112 Nos.	Each	112	₹ 5.00	₹ 560.00
11012	Hold Fasteners 100mm dia. 2x7x8 = 112 Nos. Add wastage = 3 Nos. Total = 115 Nos.	Each	115	₹ 14.00	₹ 1,610.00

11087	Wire mesh 12.5x24 gauge 1x3.6x4.2= 15.12 sqm Add wastage = 1.88 sqm Total = 17.00 sqm	sqm	17.00	₹ 45.00	₹ 765.00
	LABOUR:				
	For fixing cleats				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0209	Carpenter	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	For wrapping fibre glass wool:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	For fixing fibre glass wool and wire mesh and scaffolding				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0209	Carpenter	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
					₹ 5,819.50
	Add for adhesives, tapes, ballies and ropes for scaffolding drill for drilling holes, ladders, GI wire etc.	@	1.00%		₹ 58.20
					₹ 5,877.70
	Add for Sundries and contingencies	@	3%		₹ 176.33
					₹ 6,054.03
	Add for contractor's profit and overheads	@	15%		₹ 908.10
	Cost of providing and fixing thermal insulation for ceiling for 15.12 sqm area				₹ 6,962.13
	Cost per sqm				₹ 460.46
	Rate per sqm	Say			₹ 460.50

11.35	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8193. Density 16kg/m³, 50mm thick, wrapped in 200G Virgin Polythene bags placed over existing false ceiling and held in position by criss-crossing GI wire.				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering the work of thermal insulation of ceiling of size 3.60mx4.20m = 15.12sqm				
	MATERIALS				
11058	Resin bonded fibre glass wool: 50mm thick 1x3.60x4.20 = 15.12 sqm Add wastage = 0.38 sqm Total = 15.50 sqm	sqm	15.50	₹ 112.00	₹ 1,736.00
11002	200G virgin polythene sheet to prepare bags 1x3.60x4.20 = 15.12 sqm Add wastage and for wrapping = 1.88 sqm Total = 17.00sqm	sqm	17.00	₹ 6.00	₹ 102.00
	LABOUR:				
	For wrapping fibre glass wool:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	For placing the wrapped fibre glass wool bags on ceiling and tying with wire				
0216	Foreman	Day	0.75	₹ 425.00	₹ 318.75
0212	Helper	Day	0.75	₹ 300.00	₹ 225.00
					₹ 2,454.25

	Add for adhesives, tapes, ballies and ropes for scaffolding drill for drilling holes, ladders, GI wire etc.	@	1.00%		₹ 24.54
					₹ 2,478.79
	Add for Sundries and contingencies	@	3%		₹ 74.36
					₹ 2,553.15
	Add for contractor's profit and overheads	@	15%		₹ 382.97
	Cost of providing and fixing thermal insulation for ceiling for 15.12 sqm area				₹ 2,936.12
	Cost per sqm				₹ 194.19
	Rate per sqm	Say			₹ 194.20

11.36	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8183 having density 24 kg/m³, 50 mm thick, wrapped in 200G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering the work of thermal insulation of wall of size 10sqm				
	MATERIALS				
11059	Resin bonded fibre glass wool: 50mm thick 10 sqm Add wastage = 1 sqm Total = 11 sqm	sqm	11.00	₹ 160.00	₹ 1,760.00
11002	200G virgin polythene sheet to prepare bags 10 sqm Add wastage and for wrapping = 1.2sqm Total = 11.2sqm	sqm	11.20	₹ 6.00	₹ 67.20
	LABOUR:				
	For wrapping fibre glass wool:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	For placing the wrapped fibre glass wool bags on ceiling and tying with wire				
0216	Foreman	Day	0.40	₹ 425.00	₹ 170.00
0212	Helper	Day	0.40	₹ 300.00	₹ 120.00
					₹ 2,189.70
	Add for adhesives, tapes, ballies and ropes for scaffolding drill for drilling holes, ladders, GI wire etc.	@	1.00%		₹ 21.90
					₹ 2,211.60
	Add for Sundries and contingencies	@	3%		₹ 66.35
					₹ 2,277.95
	Add for contractor's profit and overheads	@	15%		₹ 341.69
	Cost of providing and fixing thermal insulation for ceiling for 15.12 sqm area				₹ 2,619.64
	Cost per sqm				₹ 261.96
	Rate per sqm	Say			₹ 262.00

11.37	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Rockwool conforming to IS: 8183, density 48 kg/ m³, 50 mm thick, wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5mm x 24 gauge wire mesh, for top most ceiling of building.				
Code	Discription	Unit	Quantity	Rate	Amount

	Considering the work of thermal insulation of ceiling of size 3.60mx4.20m = 15.12sqm				
	MATERIALS				
11088	Resin Bonded Rockwool: 50mm thick 1x3.60x4.20 = 15.12 sqm Add wastage = 0.38 sqm Total = 15.50 sqm	sqm	15.50	₹ 135.00	₹ 2,092.50
11002	200G virgin polythene sheet to prepare bags 1x3.60x4.20 = 15.12 sqm Add wastage and for wrapping = 1.88 sqm Total = 17.00sqm	sqm	17.00	₹ 6.00	₹ 102.00
11062	50x50x3 mm Metallic Cleats 2x7x8 = 112 Nos.	Each	112	₹ 5.00	₹ 560.00
11012	Hold Fasteners 100mm dia. 2x7x8 = 112 Nos. Add wastage = 3 Nos. Total = 115 Nos.	Each	115	₹ 14.00	₹ 1,610.00
11087	Wire mesh 12.5x24 gauge 1x3.6x4.2= 15.12 sqm Add wastage = 1.88 sqm Total = 17.00 sqm	sqm	17.00	₹ 45.00	₹ 765.00
	LABOUR:				
	For fixing cleats				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0209	Carpenter	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	For wrapping fibre glass wool:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	For fixing fibre glass wool and wire mesh and scaffolding				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0209	Carpenter	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
					₹ 5,432.00
	Add for adhesives, tapes, ballies and ropes for scaffolding drill for drilling holes, ladders, GI wire etc.	@	1.00%		₹ 54.32
					₹ 5,486.32
	Add for Sundries and contingencies	@	3%		₹ 164.59
					₹ 5,650.91
	Add for contractor's profit and overheads	@	15%		₹ 847.64
	Cost of providing and fixing thermal insulation for ceiling for 15.12 sqm area				₹ 6,498.55
	Cost per sqm				₹ 429.80
	Rate per sqm	Say			₹ 429.80

11.38	Providing and fixing thermal insulation with Resin bonded rock wool conforming to IS: 8183, density 48 kg/m³, 50 mm thick, wrapped in 200 G virgin Polythene bags placed over existing false ceiling and held in position by criss- crossing GI wire.				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering the work of thermal insulation of ceiling of size 3.60mx4.20m = 15.12sqm				
	MATERIALS				

11088	Resin bonded rock wool: 50mm thick 1x3.60x4.20 = 15.12 sqm Add wastage = 0.38 sqm Total = 15.50 sqm	sqm	15.50	₹ 135.00	₹ 2,092.50
11002	200G virgin polythene sheet to prepare bags 1x3.60x4.20 = 15.12 sqm Add wastage and for wrapping = 1.88 sqm Total = 17.00sqm	sqm	17.00	₹ 6.00	₹ 102.00
	LABOUR:				
	For wrapping fibre glass wool:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	For placing the wrapped fibre glass wool bags on ceiling and tying with wire				
0216	Foreman	Day	0.75	₹ 425.00	₹ 318.75
0212	Helper	Day	0.75	₹ 300.00	₹ 225.00
					₹ 2,810.75
	Add for adhesives, tapes, ballies and ropes for scaffolding drill for drilling holes, ladders, GI wire etc.	@	1.00%		₹ 28.11
					₹ 2,838.86
	Add for Sundries and contingencies	@	3%		₹ 85.17
					₹ 2,924.03
	Add for contractor's profit and overheads	@	15%		₹ 438.60
	Cost of providing and fixing thermal insulation for ceiling for 15.12 sqm area				₹ 3,362.63
	Cost per sqm				₹ 222.40
	Rate per sqm	Say			₹ 222.40

11.39	Providing and fixing thermal insulation with Resin Bonded rock wool conforming to IS: 8183, having density 48 kg/m³, 50 mm thick, wrapped in 200 G Virgin Polythene Bags fixed to wall with screws, rawel plug & washers and held and in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering the work of thermal insulation of wall of size 10sqm				
	MATERIALS				
11088	Resin Bonded rock wool: 50mm thick 10 sqm Add wastage = 1 sqm Total = 11 sqm	sqm	11.00	₹ 135.00	₹ 1,485.00
11002	200G virgin polythene sheet to prepare bags 10 sqm Add wastage and for wrapping = 1.2sqm Total = 11.2sqm	sqm	11.20	₹ 6.00	₹ 67.20

	LABOUR:				
	For wrapping fibre glass wool:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	For placing the wrapped fibre glass wool bags on ceiling and tying with wire				
0216	Foreman	Day	0.40	₹ 425.00	₹ 170.00
0212	Helper	Day	0.40	₹ 300.00	₹ 120.00
					₹ 1,914.70
	Add for adhesives, tapes, ballies and ropes for scaffolding drill for drilling holes, ladders, GI wire etc.	@	1.00%		₹ 19.15
					₹ 1,933.85
	Add for Sundries and contingencies	@	3%		₹ 58.02
					₹ 1,991.87
	Add for contractor's profit and overheads	@	15%		₹ 298.78
	Cost of providing and fixing thermal insulation for ceiling for 15.12 sqm area				₹ 2,290.65
	Cost per sqm				₹ 229.07
	Rate per sqm	Say			₹ 229.10

11.40	Thermal Insulation of roofing with Expanded polystyrene fixed with suitable adhesive to the false ceiling as per the directions of the Engineer-in-charge :				
11.40.1	With Type N - Normal 50 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering the work of thermal insulation of ceiling = 10.0sqm				
	MATERIALS				
11014	Type N - Normal 50 mm thick = 10.0 sqm Add wastage = 0.50 sqm Total = 10.50 sqm	sqm	10.50	₹ 135.00	₹ 1,417.50
	LABOUR:				
	For fixing				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
					₹ 2,230.00
	Add for adhesives, tapes, ballies and ropes for scaffolding drill for drilling holes, ladders, GI wire etc.	@	1.00%		₹ 22.30
					₹ 2,252.30
	Add for Sundries and contingencies	@	3%		₹ 67.57
					₹ 2,319.87
	Add for contractor's profit and overheads	@	15%		₹ 347.98
	Cost of providing and fixing thermal insulation for ceiling for 10 sqm area				₹ 2,667.85
	Cost per sqm				₹ 266.79
	Rate per sqm	Say			₹ 266.80

11.40.2	With Type SE - Self Extinguishing type 50 mm thick				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering the work of thermal insulation of ceiling = 10.0sqm				
	MATERIALS				
11013	Type SE - Self Extinguishing type 50 mm thick = 10.0 sqm Add wastage = 0.50 sqm Total = 10.50 sqm	sqm	10.50	₹ 165.00	₹ 1,732.50
	LABOUR:				
	For fixing				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
					₹ 2,545.00
	Add for adhesives, tapes, ballies and ropes for scaffolding drill for drilling holes, ladders, GI wire etc.	@	1.00%		₹ 25.45
					₹ 2,570.45
	Add for Sundries and contingencies	@	3%		₹ 77.11
					₹ 2,647.56
	Add for contractor's profit and overheads	@	15%		₹ 397.13
	Cost of providing and fixing thermal insulation for ceiling for 10 sqm area				₹ 3,044.69
	Cost per sqm				₹ 304.47
	Rate per sqm	Say			₹ 304.50

11.41	Providing and applying two coats of High Albedo paint having minimum Solar Reflective Index (SRI) 108 (with solar reflectance & thermal emittance tested as per ASTM) C 1549 and ASTM C 1371 respectively), VOC less than 10 cc/gm. The coating thickness and the methodology of application shall strctly as per manufacturer's specifications and as approved by Engineer-in-Charge. Surface preparation includes cleaning with metal wire brush to remove all dust, fungus etc., washing with water all complete. The contractor shall give guarantee for the performance of SRI and also the durability of coating, all complete as per direction of Engineer-in-Charge.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.				
	MATERIALS				
11089	High Albedo paint	kg	7.17	₹ 260.00	₹ 1,864.20
	LABOUR:				
0203	Beldar (for cleanign the surface)	Day	0.50	₹ 300.00	₹ 150.00
0227	Painter	Day	0.50	₹ 340.00	₹ 170.00
					₹ 2,184.20
	Add for carriage of material, brushes etc.	@	1%		₹ 21.84
					₹ 2,206.04
	Add for Water charges	@	1%		₹ 22.06
					₹ 2,228.10
	Add for Sundries and contingencies	@	3%		₹ 66.84
					₹ 2,294.94
	Add for contractor's profit and overheads	@	15%		₹ 344.24
	Cost of 10 sqm				₹ 2,639.18
	Cost per sqm				₹ 263.92
	Rate per sqm	Say			₹ 263.90

RAIN WATER PIPES WITH FITTINGS

11.42	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes (working pressure 4 kg/cm ²) conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion:				
11.42.1	Single socketed pipe - 75 mm OD				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 6.0m length of PVC rain water pipe				
	MATERIALS				
11075	Pipe- 75mm OD	m	6.00	₹ 80.00	₹ 480.00
11073	Seal ring	each	1.00	₹ 9.00	₹ 9.00
	LABOUR:				
0203	Beldar	Day	0.37	₹ 300.00	₹ 111.00
0215	Fitter	Day	0.19	₹ 380.00	₹ 72.20
0212	Helper	Day	0.08	₹ 300.00	₹ 24.00
					₹ 696.20
	Add for jointing materials, carriage of pipes	@	2%		₹ 13.92
					₹ 710.12
	Add for scaffolding	@	2%		₹ 10.65
					₹ 720.77
	Add for Sundries and contingencies	@	3%		₹ 21.62
					₹ 742.39
	Add for contractor's profit and overheads	@	15%		₹ 111.36
	Cost of providing and fixing on wall face PVC rain water pipe of 6.00m length				₹ 853.75
	Cost per m				₹ 142.29
	Rate per m	Say			₹ 142.30

11.42.2	Single socketed pipe - 110 mm OD				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 6.0m length of PVC rain water pipe				
	MATERIALS				
11075	Pipe- 110mm OD	m	6.00	₹ 150.00	₹ 900.00
11073	Seal ring	each	1.00	₹ 14.00	₹ 14.00
	LABOUR:				
0203	Beldar	Day	0.45	₹ 300.00	₹ 135.00
0215	Fitter	Day	0.23	₹ 380.00	₹ 87.40
0212	Helper	Day	0.11	₹ 300.00	₹ 33.00
					₹ 1,169.40
	Add for jointing materials, carriage of pipes	@	2%		₹ 23.39
					₹ 1,192.79
	Add for scaffolding	@	2%		₹ 17.89
					₹ 1,210.68
	Add for Sundries and contingencies	@	3%		₹ 36.32
					₹ 1,247.00
	Add for contractor's profit and overheads	@	15%		₹ 187.05
	Cost of providing and fixing on wall face PVC rain water pipe of 6.00m length				₹ 1,434.05
	Cost per m				₹ 239.01
	Rate per m	Say			₹ 239.00

11.43	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion:				
11.43.1	Coupler				
11.43.1.1	75 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11079	Coupler- 75mm	Each	1	₹ 22.00	₹ 22.00
11073	Seal ring	Each	2.00	₹ 9.00	₹ 18.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 47.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.48
					₹ 48.38
	Add for scaffolding	@	1%		₹ 0.48
					₹ 48.86
	Add for Sundries and contingencies	@	3%		₹ 1.47
					₹ 50.33
	Add for contractor's profit and overheads	@	15%		₹ 7.55
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 57.88
	Cost per fitting				₹ 57.88
	Rate per fitting	Say			₹ 57.90

11.43.1.2	110 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11068	Coupler- 110mm	Each	1	₹ 46.00	₹ 46.00
11072	Seal ring	Each	2.00	₹ 14.00	₹ 28.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 81.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.82
					₹ 82.72
	Add for scaffolding	@	1%		₹ 0.83
					₹ 83.55
	Add for Sundries and contingencies	@	3%		₹ 2.51
					₹ 86.06
	Add for contractor's profit and overheads	@	15%		₹ 12.91
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 98.97
	Cost per fitting				₹ 98.97
	Rate per fitting	Say			₹ 99.00

11.43.2	Single pushfit Coupler				
11.43.2.1	75 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11079	Single pushfit Coupler- 75mm	Each	1	₹ 22.00	₹ 22.00
11073	Seal ring	Each	2.00	₹ 9.00	₹ 18.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 47.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.48
					₹ 48.38
	Add for scaffolding	@	1%		₹ 0.48
					₹ 48.86
	Add for Sundries and contingencies	@	3%		₹ 1.47
					₹ 50.33
	Add for contractor's profit and overheads	@	15%		₹ 7.55
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 57.88
	Cost per fitting				₹ 57.88
	Rate per fitting	Say			₹ 57.90

11.43.2.2	110 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11078	Single pushfit Coupler- 110mm	Each	1	₹ 38.00	₹ 38.00
11072	Seal ring	Each	2.00	₹ 14.00	₹ 28.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 73.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.74
					₹ 74.64
	Add for scaffolding	@	1%		₹ 0.75
					₹ 75.39
	Add for Sundries and contingencies	@	3%		₹ 2.26
					₹ 77.65
	Add for contractor's profit and overheads	@	15%		₹ 11.65
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 89.30
	Cost per fitting				₹ 89.30
	Rate per fitting	Say			₹ 89.30

11.43.3	Single equal tee without door				
11.43.3.1	75x75x75 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11083	Single tee without door- 75x75x75 mm	Each	1	₹ 54.00	₹ 54.00
11073	Seal ring	Each	3.00	₹ 9.00	₹ 27.00
	LABOUR:				

0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 88.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.89
					₹ 89.79
	Add for scaffolding	@	1%		₹ 0.90
					₹ 90.69
	Add for Sundries and contingencies	@	3%		₹ 2.72
					₹ 93.41
	Add for contractor's profit and overheads	@	15%		₹ 14.01
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 107.42
	Cost per fitting				₹ 107.42
	Rate per fitting	Say			₹ 107.40

11.43.3.2	110x110x110mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11082	Single tee without door- 110x110x110mm	Each	1	₹ 95.00	₹ 95.00
11072	Seal ring	Each	3.00	₹ 14.00	₹ 42.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 144.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 1.45
					₹ 146.35
	Add for scaffolding	@	1%		₹ 1.46
					₹ 147.81
	Add for Sundries and contingencies	@	3%		₹ 4.43
					₹ 152.24
	Add for contractor's profit and overheads	@	15%		₹ 22.84
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 175.08
	Cost per fitting				₹ 175.08
	Rate per fitting	Say			₹ 175.10

11.43.4	Single equal tee with door				
11.43.4.1	75x75x75 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11081	Single tee with door- 75x75x75 mm	Each	1	₹ 69.00	₹ 69.00
11073	Seal ring	Each	3.00	₹ 9.00	₹ 27.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 103.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 1.04
					₹ 104.94
	Add for scaffolding	@	1%		₹ 1.05
					₹ 105.99

	Add for Sundries and contingencies	@	3%		₹ 3.18
					₹ 109.17
	Add for contractor's profit and overheads	@	15%		₹ 16.38
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 125.55
	Cost per fitting				₹ 125.55
	Rate per fitting	Say			₹ 125.60

11.43.4.2	110x110x110mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11080	Single tee with door- 110x110x110mm	Each	1	₹ 108.00	₹ 108.00
11072	Seal ring	Each	3.00	₹ 14.00	₹ 42.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 157.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 1.58
					₹ 159.48
	Add for scaffolding	@	1%		₹ 1.59
					₹ 161.07
	Add for Sundries and contingencies	@	3%		₹ 4.83
					₹ 165.90
	Add for contractor's profit and overheads	@	15%		₹ 24.89
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 190.79
	Cost per fitting				₹ 190.79
	Rate per fitting	Say			₹ 190.80

11.43.5	Bend 87.5°				
11.43.5.1	75mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11067	Bend 87.5°- 75mm	Each	1	₹ 41.00	₹ 41.00
11073	Seal ring	Each	1.00	₹ 9.00	₹ 9.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 57.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.58
					₹ 58.48
	Add for scaffolding	@	1%		₹ 0.58
					₹ 59.06
	Add for Sundries and contingencies	@	3%		₹ 1.77
					₹ 60.83
	Add for contractor's profit and overheads	@	15%		₹ 9.12
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 69.95

	Cost per fitting				₹ 69.95
	Rate per fitting	Say			₹ 70.00

11.43.5.2	110mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11066	Bend 87.5°- 110mm	Each	1	₹ 69.00	₹ 69.00
11072	Seal ring	Each	1.00	₹ 14.00	₹ 14.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 90.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.91
					₹ 91.81
	Add for scaffolding	@	1%		₹ 0.92
					₹ 92.73
	Add for Sundries and contingencies	@	3%		₹ 2.78
					₹ 95.51
	Add for contractor's profit and overheads	@	15%		₹ 14.33
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 109.84
	Cost per fitting				₹ 109.84
	Rate per fitting	Say			₹ 109.80

11.43.6	Plain shoe				
11.43.6.1	75mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11077	Plain shoe- 75mm	Each	1	₹ 31.00	₹ 31.00
11073	Seal ring	Each	1.00	₹ 9.00	₹ 9.00
	LABOUR:				
0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 47.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.48
					₹ 48.38
	Add for scaffolding	@	1%		₹ 0.48
					₹ 48.86
	Add for Sundries and contingencies	@	3%		₹ 1.47
					₹ 50.33
	Add for contractor's profit and overheads	@	15%		₹ 7.55
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 57.88
	Cost per fitting				₹ 57.88
	Rate per fitting	Say			₹ 57.90

11.43.6.2	110mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
11066	Plain shoe- 110mm	Each	1	₹ 55.00	₹ 55.00
11072	Seal ring	Each	1.00	₹ 14.00	₹ 14.00
	LABOUR:				

0215	Fitter	Day	0.005	₹ 380.00	₹ 1.90
0212	Helper	Day	0.02	₹ 300.00	₹ 6.00
					₹ 76.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 0.77
					₹ 77.67
	Add for scaffolding	@	1%		₹ 0.78
					₹ 78.45
	Add for Sundries and contingencies	@	3%		₹ 2.35
					₹ 80.80
	Add for contractor's profit and overheads	@	15%		₹ 12.12
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 92.92
	Cost per fitting				₹ 92.92
	Rate per fitting	Say			₹ 92.90

11.44	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing with cement mortar 1 : 4 (1cement : 4 fine sand) making good the wall etc. complete.				
11.44.1	75mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 5 clips to be provided with 2 holes each.				
	MATERIALS				
11071	Unplasticised PVC pipe clips-75mm	Each	5	₹ 18.00	₹ 90.00
11035	Hard wood plugs 7x2 = 14 Nos.of size 50x50x50mm	Each	10	₹ 11.00	₹ 110.00
11007	25mm long MS screws 5x2 = 10 Nos.	cent	10	₹ 69.00	₹ 6.90
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.70	₹ 400.00	₹ 280.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
					₹ 690.03
	Add for carriage of fitting, mortar for making good holes	@	8%		₹ 55.20
					₹ 745.23
	Add for ladders, supports and cost of sharpening chissels etc.	@	7.5%		₹ 55.89
					₹ 801.12
	Add for Sundries and contingencies	@	3%		₹ 24.03
					₹ 825.15
	Add for contractor's profit and overheads	@	15%		₹ 123.77
	Cost of providing and fixing 5 Nos. PVC clip				₹ 948.92
	Cost per one No. clip				₹ 189.78
	Rate per clip	Say			₹ 189.80

11.44.2	110mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 5 clips to be provided with 2 holes each.				
	MATERIALS				
11070	Unplasticised PVC pipe clips-75mm	Each	5	₹ 19.00	₹ 95.00

11035	Hard wood plugs 5x2 = 10 Nos.of size 50x50x50mm	Each	10	₹ 11.00	₹ 110.00
11007	25mm long MS screws 5x2 = 10 Nos.	cent	10	₹ 69.00	₹ 6.90
	LABOUR:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0218*	Mason	Day	0.70	₹ 400.00	₹ 280.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
					₹ 695.03
	Add for carriage of fitting, mortar for making good holes	@	8%		₹ 55.60
					₹ 750.63
	Add for ladders, supports and cost of sharpening chissels etc.	@	7.5%		₹ 56.30
					₹ 806.93
	Add for Sundries and contingencies	@	3%		₹ 24.21
					₹ 831.14
	Add for contractor's profit and overheads	@	15%		₹ 124.67
	Cost of providing and fixing 7 Nos. PVC clip				₹ 955.81
	Cost per one No. clip				₹ 191.16
	Rate per clip	Say			₹ 191.20

11.45	Providing and fixing to the inlet mouth of rain water pipe PTMT grating with thickness of 8mm and weighing not less than 100gm. complete.				
11.45.1	75mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PTMT grating				
	MATERIALS				
19114	PTMT grating-75mm	Each	1	₹ 40.00	₹ 40.00
	LABOUR:				
0215	Fitter	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
					₹ 74.00
	Add for carriage of fitting etc.	@	3%		₹ 2.22
					₹ 76.22
	Add for Sundries and contingencies	@	3%		₹ 2.29
					₹ 78.51
	Add for contractor's profit and overheads	@	15%		₹ 11.78
	Cost of providing and fixing 1 Nos. PTMT grating				₹ 90.29
	Cost per one No. PTMT grating				₹ 90.29
	Rate per grating	Say			₹ 90.30

11.45.2	100mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PTMT grating				
	MATERIALS				
19003	PTMT grating-100mm	Each	1	₹ 48.00	₹ 48.00
	LABOUR:				
0215	Fitter	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
					₹ 82.00
	Add for carriage of fitting etc.	@	3%		₹ 2.46
					₹ 84.46
	Add for Sundries and contingencies	@	3%		₹ 2.53

					₹	86.99
	Add for contractor's profit and overheads	@	15%		₹	13.05
	Cost of providing and fixing 1 Nos. PTMT grating				₹	100.04
	Cost per one No. PTMT grating				₹	100.04
	Rate per grating	Say			₹	100.00

S U B - H E A D - 1 2



F I N I S H I N G W O R K

SUB HEAD : 12.0 / FINISHING WORK
BASIC RATES

Code No.	Description	Unit	Rate
0205	Bhisti	Day	₹ 300.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0223	Mason (for plaster of paris work) 1st class	Day	₹ 425.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0224	Mate	Day	₹ 300.00
0227	Painter	Day	₹ 340.00
0223	White Washer	Day	₹ 340.00
0218*	Mason (average)	Day	₹ 400.00
12035	Soft water	Litre	₹ 3.00
12025	Indigo	Kg	₹ 65.00
12012	Colouring material	Kg	₹ 75.00
12002	Acrylic distemper 1st quality having VOC content less than 50 gm / litre	Kg	₹ 45.00
12001	Red oxide Zinc chromate primer	Kg	₹ 75.00
12011	Coal Tar	Litre	₹ 35.00
3001	Portland Cement	tonne	₹ 6,100.00
12023	Glue	Kg	₹ 135.00
02004	Kerosene oil	Litre	₹ 48.00
12017	Dehradun white lime	Kg	₹ 7.50
12019	Dry hydrated lime (factory made)	Kg	₹ 320.00
03005	Marble powder	Cum	₹ 3,780.00
03004	Marble chips up to 4mm and downsize White & black	Kg	₹ 541.00
12018	Dry distemper	Kg	₹ 35.00
12027	Oil bound washable distemper/ Acrylic distemper	Kg	₹ 52.00
12026	Linseed oil (double boiled)	Litre	₹ 210.00
12010	Cement primer	Litre	₹ 71.00
12034	Distemper Primer	Litre	₹ 70.00
12030	Pink or grey primer (for wood)	Litre	₹ 94.00
12005	Aluminium paint	Litre	₹ 142.00
12003	Acid proof paint (chocolate or black)	Litre	₹ 230.00
12008	Anticorrosive bituminous paint (black)	Litre	₹ 115.00

Code No.	Description	Unit	Rate
12009	Black Japan Paint	Litre	₹ 110.00
12022	Floor enamel paint in all shades except green	Litre	₹ 130.00
12041	Synthetic enamel paint in black or chocolate shade	Litre	₹ 185.00
12040	Synthetic enamel paint in all shades except black or chocolate shade	Litre	₹ 155.00
12032	Plastic emulsion paint	Litre	₹ 220.00
12045	White lead	Kg	₹ 155.00
12043	Water proofing cement paint	Kg	₹ 44.00
12044	Wax polish (ready made)	Kg	₹ 265.00
12029	Ordinary varnish	Litre	₹ 110.00
12038	Superior copal varnish	Litre	₹ 145.00
12039	Superior spar varnish	Litre	₹ 145.00
12028	Oil type wood preservative	Litre	₹ 155.00
12031	Plaster of Paris	Kg	₹ 6.50
02003	Sand (fine) : Selected quarry	Cum	₹ 370.00
12047	Wood filler (Shellac)	Kg	₹ 330.00
12036	Spirit	Litre	₹ 72.00
12016	Crushed stone 2.36 mm to 12.5 mm size	Cum	₹ 2,850.00
04015	Water proofing materials	Kg	₹ 44.00
12046	Whiting	Kg	₹ 6.50
12006	Aluminium primer	Litre	₹ 95.00
12013	Copper acetate	Kg	₹ 320.00
12024	Hydrochloric acid	Kg	₹ 45.00
12014	Copper chloride	Kg	₹ 310.00
12015	Copper nitrate	Kg	₹ 235.00
12007	Ammonium chloride	Kg	₹ 25.00
12020	Epoxy paint	Litre	₹ 250.00
12021	Fire retardant paint	Litre	₹ 290.00
12004	Acrylic exterior paint	Litre	₹ 185.00
12033	Premium Acrylic smooth exterior paint	Litre	₹ 218.00
12042	Textured exterior paint	Litre	₹ 245.00
12048	White cement based putty	kg	₹ 25.00
12049	Water thinnable cement primer for interior wall surface, having VOC content less than 50 grams/ litre	litre	₹ 60.00

Code No.	Description	Unit	Rate
12050	Exterior primer	kg	₹ 55.00
12051	Multi Surface Paint	litre	₹ 275.00
12052	Special primer (C.W.)	litre	₹ 160.00
12053	Ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	litre	₹ 135.00
12054	Ready mixed red oxide zinc chromatic on steel / iron works having VOC content less than 250 grams/ litre	litre	₹ 130.00
12055	Water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	litre	₹ 67.00
12056	Silicon and acrylic emulsion	litre	₹ 150.00
12057	Acrylic emulsion, having VOC content less than 50 grams/ litre	litre	₹ 198.00
12058	Premium acrylic emulsion paint of interior grade, having VOC content less than 50 grams/ litre	litre	₹ 225.00
12059	Synthetic enamel paint, having VOC content less than 150 grams/ litre	litre	₹ 214.00
12060	Premixed super white gypsum plaster	kg	₹ 6.00
12061	Synthetic ployster triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40	kg	₹ 405.00
0434	Carriage: Plaster of Paris	tonne	₹ 110.94
0455	Carriage: Water proofing material	Kg	₹ 0.13
0455	Carriage: White lime	tonne	₹ 124.80
0455	Carriage: Whiting	tonne	₹ 124.80
0455	Carriage: Lime	tonne	₹ 124.80
0421	Carriage: Cement	tonne	₹ 110.94
0425	Carriage: Fine Sand	Cum	₹ 142.63
0431	Carriage: Marble chips	Cum	₹ 130.51

SUB HEAD : 12.0					
FINISHING WORK					
Note :- Rates for external plaster are for height upto 10m from ground level unless otherwise stated.					
	CEMENT PLASTER				
12.1	12 mm cement plaster of mix				
12.1.1	Cement mortar 1:3 (1 cement : 3 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	Cum	0.144	₹ 3,992.09	₹ 574.86
	(Rate as per item no. 3.3)				
	Labour:-				
0218*	Mason (average)	Day	0.67	₹ 400.00	₹ 268.00
0203	Beldar	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhisti	Day	0.92	₹ 300.00	₹ 276.00
	Add cost of scaffolding, pumps for water etc.	@	2.50%	₹ 1,343.86	₹ 33.60
	Add for water charges	@	1.00%	₹ 1,377.46	₹ 13.77
	Add for sundries and contingencies	@	3.00%	₹ 1,391.23	₹ 41.74
	Add for contractor's profit and overheads	@	15.00%	₹ 1,432.97	₹ 214.95
	Cost of 10 sqm.				₹ 1,647.92
	Cost of 1 Sqm.				₹ 164.79
	Say				₹ 164.80

12.1.2	Cement mortar 1:4 (1 cement : 4 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	Cum	0.144	₹ 3,184.67	₹ 458.59
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.67	₹ 400.00	₹ 268.00
0203	Beldar	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhisti	Day	0.92	₹ 300.00	₹ 276.00
	Add cost of scaffolding, pumps for water etc.	@	2.50%	₹ 1,227.59	₹ 30.69
	Add for water charges	@	1.00%	₹ 1,258.28	₹ 12.58
	Add for sundries and contingencies	@	3.00%	₹ 1,270.86	₹ 38.13
	Add for contractor's profit and overheads	@	15.00%	₹ 1,308.99	₹ 196.35
	Cost of 10 sqm.				₹ 1,505.34
	Cost of 1 Sqm.				₹ 150.53
	Say				₹ 150.50

12.1.3	Cement mortar 1:5 (1 cement : 5 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 5 (1 cement : 5 fine sand).	Cum	0.144	₹ 2,749.90	₹ 395.99
	(Rate as per item no. 3.5)				
	Labour:-				
0218*	Mason (average)	Day	0.67	₹ 400.00	₹ 268.00
0203	Beldar	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhisti	Day	0.92	₹ 300.00	₹ 276.00
	Add cost of scaffolding, pumps for water etc.	@	2.50%	₹ 1,164.99	₹ 29.12
	Add for water charges	@	1.00%	₹ 1,194.11	₹ 11.94
	Add for sundries and contingencies	@	3.00%	₹ 1,206.05	₹ 36.18

	Add for contractor's profit and overheads	@	15.00%	₹ 1,242.23	₹ 186.33
	Cost of 10 sqm.				₹ 1,428.56
	Cost of 1 Sqm.				₹ 142.86
	Say				₹ 142.90

12.1.4 Cement mortar 1:6 (1 cement : 6 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 6 (1 cement : 6 fine sand).	Cum	0.144	₹ 2,377.25	₹ 342.32
	(Rate as per item no. 3.6)				
	Labour:-				
0218*	Mason (average)	Day	0.67	₹ 400.00	₹ 268.00
0203	Beldar	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhisti	Day	0.92	₹ 300.00	₹ 276.00
	Add cost of scaffolding, pumps for water etc.	@	2.50%	₹ 1,111.32	₹ 27.78
	Add for water charges	@	1.00%	₹ 1,139.10	₹ 11.39
	Add for sundries and contingencies	@	3.00%	₹ 1,150.49	₹ 34.51
	Add for contractor's profit and overheads	@	15.00%	₹ 1,185.00	₹ 177.75
	Cost of 10 sqm.				₹ 1,362.75
	Cost of 1 Sqm.				₹ 136.28
	Say				₹ 136.30

12.2 15 mm cement plaster on the rough side of single or half brick wall of mix:					
12.2.1 Cement mortar 1:3 (1 cement : 3 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	Cum	0.172	₹ 3,992.09	₹ 686.64
	(Rate as per item no. 3.3)				
	Labour:-				
0218*	Mason (average)	Day	0.80	₹ 400.00	₹ 320.00
0203	Beldar	Day	0.88	₹ 300.00	₹ 264.00
0205	Bhisti	Day	0.99	₹ 300.00	₹ 297.00
	Add cost of scaffolding, pumps for water etc.	@	2.25%	₹ 1,567.64	₹ 35.27
	Add for water charges	@	1.00%	₹ 1,602.91	₹ 16.03
	Add for sundries and contingencies	@	3.00%	₹ 1,618.94	₹ 48.57
	Add for contractor's profit and overheads	@	15.00%	₹ 1,667.51	₹ 250.13
	Cost of 10 sqm.				₹ 1,917.64
	Cost of 1 Sqm.				₹ 191.76
	Say				₹ 191.80

12.2.2 Cement mortar 1:4 (1 cement : 4 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	Cum	0.172	₹ 3,184.67	₹ 547.76
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.80	₹ 400.00	₹ 320.00
0203	Beldar	Day	0.88	₹ 300.00	₹ 264.00
0205	Bhisti	Day	0.99	₹ 300.00	₹ 297.00
	Add cost of scaffolding, pumps for water etc.	@	2.25%	₹ 1,428.76	₹ 32.15
	Add for water charges	@	1.00%	₹ 1,460.91	₹ 14.61
	Add for sundries and contingencies	@	3.00%	₹ 1,475.52	₹ 44.27
	Add for contractor's profit and overheads	@	15.00%	₹ 1,519.79	₹ 227.97

	Cost of 10 sqm.				₹ 1,747.76
	Cost of 1 Sqm.				₹ 174.78
	Say				₹ 174.80

12.2.3 Cement mortar 1:5 (1 cement : 5 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 5 (1 cement : 5 fine sand).	Cum	0.172	₹ 2,749.90	₹ 472.98
	(Rate as per item no. 3.5)				
	Labour:-				
0218*	Mason (average)	Day	0.80	₹ 400.00	₹ 320.00
0203	Beldar	Day	0.88	₹ 300.00	₹ 264.00
0205	Bhisti	Day	0.99	₹ 300.00	₹ 297.00
	Add cost of scaffolding, pumps for water etc.	@	2.25%	₹ 1,353.98	₹ 30.46
	Add for water charges	@	1.00%	₹ 1,384.44	₹ 13.84
	Add for sundries and contingencies	@	3.00%	₹ 1,398.28	₹ 41.95
	Add for contractor's profit and overheads	@	15.00%	₹ 1,440.23	₹ 216.03
	Cost of 10 sqm.				₹ 1,656.26
	Cost of 1 Sqm.				₹ 165.63
	Say				₹ 165.60

12.2.4 Cement mortar 1:6 (1 cement : 6 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 6 (1 cement : 6 fine sand).	Cum	0.172	₹ 2,377.25	₹ 408.89
	(Rate as per item no. 3.6)				
	Labour:-				
0218*	Mason (average)	Day	0.80	₹ 400.00	₹ 320.00
0203	Beldar	Day	0.88	₹ 300.00	₹ 264.00
0205	Bhisti	Day	0.99	₹ 300.00	₹ 297.00
	Add cost of scaffolding, pumps for water etc.	@	2.25%	₹ 1,289.89	₹ 29.02
	Add for water charges	@	1.00%	₹ 1,318.91	₹ 13.19
	Add for sundries and contingencies	@	3.00%	₹ 1,332.10	₹ 39.96
	Add for contractor's profit and overheads	@	15.00%	₹ 1,372.06	₹ 205.81
	Cost of 10 sqm.				₹ 1,577.87
	Cost of 1 Sqm.				₹ 157.79
	Say				₹ 157.80

12.3 20 mm cement plaster of mix :					
12.3.1 Cement mortar 1:3 (1 cement : 3 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	Cum	0.224	₹ 3,992.09	₹ 894.23
	(Rate as per item no. 3.3)				
	Labour:-				
0218*	Mason (average)	Day	0.92	₹ 400.00	₹ 368.00
0203	Beldar	Day	1.02	₹ 300.00	₹ 306.00
0205	Bhisti	Day	1.10	₹ 300.00	₹ 330.00
	Add cost of scaffolding, pumps for water etc.	@	2.00%	₹ 1,898.23	₹ 37.96
	Add for water charges	@	1.00%	₹ 1,936.19	₹ 19.36
	Add for sundries and contingencies	@	3.00%	₹ 1,955.55	₹ 58.67
	Add for contractor's profit and overheads	@	15.00%	₹ 2,014.22	₹ 302.13

	Cost of 10 sqm.				₹ 2,316.35
	Cost of 1 Sqm.				₹ 231.64
	Say				₹ 231.60

12.3.2 Cement mortar 1:4 (1 cement : 4 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	Cum	0.224	₹ 3,184.67	₹ 713.37
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.92	₹ 400.00	₹ 368.00
0203	Beldar	Day	1.02	₹ 300.00	₹ 306.00
0205	Bhisti	Day	1.10	₹ 300.00	₹ 330.00
	Add cost of scaffolding, pumps for water etc.	@	2.00%	₹ 1,717.37	₹ 34.35
	Add for water charges	@	1.00%	₹ 1,751.72	₹ 17.52
	Add for sundries and contingencies	@	3.00%	₹ 1,769.24	₹ 53.08
	Add for contractor's profit and overheads	@	15.00%	₹ 1,822.32	₹ 273.35
	Cost of 10 sqm.				₹ 2,095.67
	Cost of 1 Sqm.				₹ 209.57
	Say				₹ 209.60

12.3.3 Cement mortar 1:5 (1 cement : 5 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 5 (1 cement : 5 fine sand).	Cum	0.224	₹ 2,749.90	₹ 615.98
	(Rate as per item no. 3.5)				
	Labour:-				
0218*	Mason (average)	Day	0.92	₹ 400.00	₹ 368.00
0203	Beldar	Day	1.02	₹ 300.00	₹ 306.00
0205	Bhisti	Day	1.10	₹ 300.00	₹ 330.00
	Add cost of scaffolding, pumps for water etc.	@	2.00%	₹ 1,619.98	₹ 32.40
	Add for water charges	@	1.00%	₹ 1,652.38	₹ 16.52
	Add for sundries and contingencies	@	3.00%	₹ 1,668.90	₹ 50.07
	Add for contractor's profit and overheads	@	15.00%	₹ 1,718.97	₹ 257.85
	Cost of 10 sqm.				₹ 1,976.82
	Cost of 1 Sqm.				₹ 197.68
	Say				₹ 197.70

12.3.4 Cement mortar 1:6 (1 cement : 6 fine sand)					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 6 (1 cement : 6 fine sand).	Cum	0.224	₹ 2,377.25	₹ 532.50
	(Rate as per item no. 3.6)				
	Labour:-				
0218*	Mason (average)	Day	0.92	₹ 400.00	₹ 368.00
0203	Beldar	Day	1.02	₹ 300.00	₹ 306.00
0205	Bhisti	Day	1.10	₹ 300.00	₹ 330.00
	Add cost of scaffolding, pumps for water etc.	@	2.00%	₹ 1,536.50	₹ 30.73
	Add for water charges	@	1.00%	₹ 1,567.23	₹ 15.67
	Add for sundries and contingencies	@	3.00%	₹ 1,582.90	₹ 47.49
	Add for contractor's profit and overheads	@	15.00%	₹ 1,630.39	₹ 244.56
	Cost of 10 sqm.				₹ 1,874.95

	Cost of 1 Sqm.				₹ 187.50
	Say				₹ 187.50

12.4	6 mm cement plaster of mix :				
12.4.1	Cement mortar 1:3 (1 cement : 3 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	Cum	0.072	₹ 3,992.09	₹ 287.43
	(Rate as per item no. 3.3)				
	Labour:-				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0218*	Mason (average)	Day	0.75	₹ 400.00	₹ 300.00
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti	Day	0.15	₹ 300.00	₹ 45.00
	Add cost of scaffolding, pumps for water etc.	@	3.00%	₹ 1,112.43	₹ 33.37
	Add cost of hacking with a sharp tool removing barrs, cleaning surface with wire brush etc scaffolding, pumps for water etc.	@	5.00%	₹ 1,145.80	₹ 57.29
	Add for water charges	@	1.00%	₹ 1,145.80	₹ 11.46
	Add for sundries and contingencies	@	3.00%	₹ 1,157.26	₹ 34.72
	Add for contractor's profit and overheads	@	15.00%	₹ 1,191.98	₹ 178.80
	Cost of 10 sqm.				₹ 1,428.07
	Cost of 1 Sqm.				₹ 142.81
	Say				₹ 142.80

12.4.2	Cement mortar 1:4 (1 cement : 4 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	Cum	0.072	₹ 3,184.67	₹ 229.30
	(Rate as per item no. 3.4)				
	Labour:-				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0218*	Mason (average)	Day	0.75	₹ 400.00	₹ 300.00
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhisti	Day	0.15	₹ 300.00	₹ 45.00
	Add cost of scaffolding, pumps for water etc.	@	3.00%	₹ 1,054.30	₹ 31.63
	Add cost of hacking with a sharp tool removing barrs, cleaning surface with wire brush etc scaffolding, pumps for water etc.	@	5.00%	₹ 1,085.93	₹ 54.30
	Add for water charges	@	1.00%	₹ 1,085.93	₹ 10.86
	Add for sundries and contingencies	@	3.00%	₹ 1,096.79	₹ 32.90
	Add for contractor's profit and overheads	@	15.00%	₹ 1,129.69	₹ 169.45
	Cost of 10 sqm.				₹ 1,353.44
	Cost of 1 Sqm.				₹ 135.34
	Say				₹ 135.30

12.5	Neat cement punning.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
3001	Cement for slurry	tonne	0.022	₹ 6,100.00	₹ 134.20
0421	Carriage of cement	tonne	0.022	₹ 110.94	₹ 2.44
	Labour:-				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0218*	Mason (average)	Day	0.30	₹ 400.00	₹ 120.00
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00

0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add for water charges	@	1.00%	₹ 370.64	₹ 3.71
	Add for sundries and contingencies	@	3.00%	₹ 374.35	₹ 11.23
	Add for contractor's profit and overheads	@	15.00%	₹ 385.58	₹ 57.84
	Cost of 10 sqm.				₹ 443.42
	Cost of 1 Sqm.				₹ 44.34
	Say				₹ 44.30

12.6	6 mm cement plaster in single layer finished with a floating coat of neat cement, curing and a thick coat of lime wash on top when dry on wall bearings for RCC slabs and beams complete.				
12.6.1	Cement mortar 1:3 (1 cement : 3 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
	6 mm. C.P. (Item No. 12.4.1)	Sqm.	10.00	₹ 142.80	₹ 1,428.00
	Providing a floating coat of neat cement (Item No. 12.5)	Sqm.	10.00	₹ 44.30	₹ 443.00
	Lime wash (Item No. 12.20)	Sqm.	10.00	₹ 20.10	₹ 201.00
	Cost of 10 sqm.				₹ 2,072.00
	Cost of 1 Sqm.				₹ 207.20
	Say				₹ 207.20

12.7	Rough cast plaster upto 10 m height above ground level with a mixture of sand and gravel or crushed stone graded from 6 mm to 10 mm nominal size dashed over and including the fresh plaster in two layers a) Under layer 12 mm cement plaster 1 : 4 (1 cement : 4 fine sand) b) Top layer 10 mm cement plaster 1 : 3 (1 cement : 3 fine sand) mixed with 10% fine grounded hydrated lime by volume of cement and curing complete.				
12.7.1	Ordinary Cement finish using ordinary cement.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials & Labours:-				
	Under layer 12 mm thick cement plaster				
	Cement mortar 1 : 4 (1 cement : 4 fine sand).	cum	0.144	₹ 3,184.67	₹ 458.59
0218*	Mason (average)	Day	0.67	₹ 400.00	₹ 268.00
0203	Beldar	Day	0.75	₹ 300.00	₹ 225.00
0205	Bhisti	Day	0.92	₹ 300.00	₹ 276.00
	Top layer 10 mm thick cement plaster				
	Cement mortar 1 : 3 (1 cement : 3 fine sand).	cum	0.12	₹ 3,992.09	₹ 479.05
0218*	Mason (average)	Day	0.61	₹ 400.00	₹ 244.00
0203	Beldar	Day	0.69	₹ 300.00	₹ 207.00
0205	Bhisti	Day	0.85	₹ 300.00	₹ 255.00
12016	Gravel or crushed stone 6mm to 10mm	cum	0.10	₹ 2,850.00	₹ 285.00
0205	Bhisti	Day	0.01	₹ 300.00	₹ 3.00
12019	Ground hydrated lime (factory made)	kg.	9.00	₹ 320.00	₹ 2,880.00
0218*	Mason (average)	Day	0.50	₹ 400.00	₹ 200.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
0205	Bhisti	Day	0.10	₹ 300.00	₹ 30.00
	Labour for scooping				
0219	Mason (brick layer) 1st class	Day	0.25	₹ 425.00	₹ 106.25
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	Add for carriage of sand, gravel and lime etc.	@	3.00%	₹ 6,141.89	₹ 184.26

	Add cost of scaffolding, lift, pumps for water etc.	@	5.00%	₹ 6,326.15	₹ 316.31
	Add for water charges	@	1.00%	₹ 6,642.46	₹ 66.42
	Add for sundries and contingencies	@	3.00%	₹ 6,708.88	₹ 201.27
	Add for contractor's profit and overheads	@	15.00%	₹ 6,910.15	₹ 1,036.52
	Cost of 10 sqm.				₹ 7,946.67
	Cost of 1 Sqm.				₹ 794.67
	Say				₹ 794.70

12.8	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost 12 mm cement plaster 1:3				
	Materials:-				
	(1 Cement: 3 fine sand) = 10 sqm. or 1.48 bags of cement used in the mix Cement required for 10 sqm. = 73.89 kg				
04015	Water proofing materials required @ 1 kg per 50kg of cement = 1.48 kg	Kg	1.48	₹ 44.00	₹ 65.12
0455	Carriage of Water proofing materials	Kg	1.48	₹ 0.13	₹ 0.19
	Add for sundries and contingencies	@	3.00%	₹ 65.31	₹ 1.96
	Add for contractor's profit and overheads	@	15.00%	₹ 67.27	₹ 10.09
	Cost for 1.48 bags of cement used in the mix				₹ 77.36
	Cost for 1 Kg. of water proofing material				₹ 52.27
	Say				₹ 52.30

12.9	Extra for plastering exterior walls of height more than 10 m from GL for every additional height of 3 m or part thereof complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Labour:-				
0218*	Mason (average)	Day	0.20	₹ 400.00	₹ 80.00
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
0205	Bhisti	Day	0.10	₹ 300.00	₹ 30.00
	Add cost of scaffolding, hire charge of pumps for water lifts etc.	@	50.00%	₹ 200.00	₹ 100.00
	Add for water charges	@	1.00%	₹ 300.00	₹ 3.00
	Add for sundries and contingencies	@	3.00%	₹ 303.00	₹ 9.09
	Add for contractor's profit and overheads	@	15.00%	₹ 312.09	₹ 46.81
	Cost of 10 sqm.				₹ 358.90
	Cost of 1 Sqm.				₹ 35.89
	Say				₹ 35.90

12.10	Extra for plastering on circular work not exceeding 6 m in radius complete.				

12.10.1	In one layer				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Labour:-				
0218*	Mason (average)	Day	0.20	₹ 400.00	₹ 80.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	Add cost of templates etc.	@	8.00%	₹ 140.00	₹ 11.20
	Add for hire charge of lifts, pumps for water etc.	@	10.00%	₹ 151.20	₹ 15.12
	Add for scaffolding	@	5.00%	₹ 166.32	₹ 8.32
	Add for water charges	@	1.00%	₹ 174.64	₹ 1.75
	Add for sundries and contingencies	@	3.00%	₹ 176.39	₹ 5.29
	Add for contractor's profit and overheads	@	15.00%	₹ 181.68	₹ 27.25
	Cost of 10 sqm.				₹ 208.93
	Cost of 1 Sqm.				₹ 20.89

	Say				₹ 20.90

12.10.2 In two layer					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Labour:-				
0218*	Mason (average)	Day	0.30	₹ 400.00	₹ 120.00
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	Add cost of templates etc.	@	8.00%	₹ 210.00	₹ 16.80
	Add for hire charge of lifts, pumps for water etc.	@	10.00%	₹ 226.80	₹ 22.68
	Add for scaffolding	@	5.00%	₹ 249.48	₹ 12.47
	Add for water charges	@	1.00%	₹ 261.95	₹ 2.62
	Add for sundries and contingencies	@	3.00%	₹ 264.57	₹ 7.94
	Add for contractor's profit and overheads	@	15.00%	₹ 272.51	₹ 40.88
	Cost of 10 sqm.				₹ 313.39
	Cost of 1 Sqm.				₹ 31.34
	Say				₹ 31.30

12.11	Extra for plastering done on moulding cornices or architraves including neat finish to line and level.				

12.11.1 In one layer					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Labour:-				
0218*	Mason (average)	Day	3.00	₹ 400.00	₹ 1,200.00
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
0205	Bhisti	Day	0.25	₹ 300.00	₹ 75.00
	Add cost of templates etc.	@	2.50%	₹ 2,175.00	₹ 54.38
	Add for additional scaffolding	@	4.00%	₹ 2,229.38	₹ 89.18
	Add for hire charge of lifts, pumps etc.	@	2.50%	₹ 2,318.56	₹ 57.96
	Add for water charges	@	1.00%	₹ 2,376.52	₹ 23.77
	Add for sundries and contingencies	@	3.00%	₹ 2,400.29	₹ 72.01
	Add for contractor's profit and overheads	@	15.00%	₹ 2,472.30	₹ 370.85
	Cost of 10 sqm.				₹ 2,843.15
	Cost of 1 Sqm.				₹ 284.32
	Say				₹ 284.30

12.11.2 In two layer					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Labour:-				
0218*	Mason (average)	Day	5.00	₹ 400.00	₹ 2,000.00
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
0212	Coolie	Day	2.00	₹ 300.00	₹ 600.00
0205	Bhisti	Day	0.33	₹ 300.00	₹ 99.00
	Add cost of templates etc.	@	2.50%	₹ 3,599.00	₹ 89.98
	Add for additional scaffolding	@	4.00%	₹ 3,688.98	₹ 147.56
	Add for hire charge of lifts, pumps etc.	@	2.50%	₹ 3,836.54	₹ 95.91
	Add for water charges	@	1.00%	₹ 3,932.45	₹ 39.32
	Add for sundries and contingencies	@	3.00%	₹ 3,971.77	₹ 119.15
	Add for contractor's profit and overheads	@	15.00%	₹ 4,090.92	₹ 613.64
	Cost of 10 sqm.				₹ 4,704.56
	Cost of 1 Sqm.				₹ 470.46
	Say				₹ 470.50

12.12	Extra for plastering:				
12.12.1	In Spherial ceiling				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sam				

	Labour:-				
0218*	Mason (average)	Day	0.75	₹ 400.00	₹ 300.00
0203	Beldar	Day	0.74	₹ 300.00	₹ 222.00
	Add cost of templates etc.	@	8.00%	₹ 522.00	₹ 41.76
	Add for extra scaffolding	@	5.00%	₹ 563.76	₹ 28.19
	Add for hire charge of lifts, pumps etc.	@	4.00%	₹ 591.95	₹ 23.68
	Add for water charges	@	1.00%	₹ 615.63	₹ 6.16
	Add for sundries and contingencies	@	3.00%	₹ 621.79	₹ 18.65
	Add for contractor's profit and overheads	@	15.00%	₹ 640.44	₹ 96.07
	Cost of 10 sqm.				₹ 736.51
	Cost of 1 Sqm.				₹ 73.65
	Say				₹ 73.70

12.12.2 In Groined ceiling					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Labour:-				
0218*	Mason (average)	Day	0.80	₹ 400.00	₹ 320.00
0203	Beldar	Day	0.80	₹ 300.00	₹ 240.00
	Add cost of templates etc.	@	8.00%	₹ 560.00	₹ 44.80
	Add for extra scaffolding	@	5.00%	₹ 604.80	₹ 30.24
	Add for hire charge of lifts, pumps etc.	@	4.00%	₹ 635.04	₹ 25.40
	Add for water charges	@	1.00%	₹ 660.44	₹ 6.60
	Add for sundries and contingencies	@	3.00%	₹ 667.04	₹ 20.01
	Add for contractor's profit and overheads	@	15.00%	₹ 687.05	₹ 103.06
	Cost of 10 sqm.				₹ 790.11
	Cost of 1 Sqm.				₹ 79.01
	Say				₹ 79.00

12.12.3 In Flewing soffits					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Labour:-				
0218*	Mason (average)	Day	0.50	₹ 400.00	₹ 200.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	Add cost of templates etc.	@	8.00%	₹ 350.00	₹ 28.00
	Add for extra scaffolding	@	5.00%	₹ 378.00	₹ 18.90
	Add for hire charge of lifts, pumps etc.	@	4.00%	₹ 396.90	₹ 15.88
	Add for water charges	@	1.00%	₹ 412.78	₹ 4.13
	Add for sundries and contingencies	@	3.00%	₹ 416.91	₹ 12.51
	Add for contractor's profit and overheads	@	15.00%	₹ 429.42	₹ 64.41
	Cost of 10 sqm.				₹ 493.83
	Cost of 1 Sqm.				₹ 49.38
	Say				₹ 49.40

12.13 Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12031	Plaster of Paris =10x0.002x1121 = 22.42kg <u>Add wastage = 1.08Kg</u> Total = 23.50Kg	Kg	23.50	₹ 6.50	₹ 152.75
0434	Carriage of Plaster of Paris	tonne	0.0235	₹ 110.94	₹ 2.61
	Labour:-				
0224	Mate	Day	0.20	₹ 300.00	₹ 60.00
0223	Mason (for plaster of paris work) 1st class	Day	1.00	₹ 425.00	₹ 425.00
0203	Beldar	Day	0.90	₹ 300.00	₹ 270.00
0205	Bhisti	Day	0.20	₹ 300.00	₹ 60.00

	Add cost of scaffolding, pumps for water etc.	@	3.00%	₹ 970.36	₹ 29.11
	Add for water charges	@	1.00%	₹ 999.47	₹ 9.99
	Add for sundries and contingencies	@	3.00%	₹ 1,009.46	₹ 30.28
	Add for contractor's profit and overheads	@	15.00%	₹ 1,039.74	₹ 155.96
	Cost of 10 sqm.				₹ 1,195.70
	Cost of 1 Sqm.				₹ 119.57
	Say				₹ 119.60

12.14	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12048	White cement based putty =10x0.001x1429 = 14.29kg <u>Add 2% wastage = 0.29Kg</u> Total = 14.58Kg	Kg	14.58	₹ 25.00	₹ 364.50
0434	Carriage	tonne	0.01458	₹ 110.94	₹ 1.62
	Labour:-				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0223	Mason (for plaster of paris work) 1st class	Day	0.45	₹ 425.00	₹ 191.25
0203	Beldar	Day	0.45	₹ 300.00	₹ 135.00
0205	Bhisti	Day	0.10	₹ 300.00	₹ 30.00
	Add cost of scaffolding, pumps for water etc.	@	3.00%	₹ 722.37	₹ 21.67
	Add for water charges	@	1.00%	₹ 744.04	₹ 7.44
	Add for sundries and contingencies	@	3.00%	₹ 751.48	₹ 22.54
	Add for contractor's profit and overheads	@	15.00%	₹ 774.02	₹ 116.10
	Cost of 10 sqm.				₹ 920.12
	Cost of 1 Sqm.				₹ 92.01
	Say				₹ 92.00

ARTIFICIAL STONE PLASTER					
12.15	Extra for lining out plaster to imitate stone or concrete blocks walling.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Labour:-				
0218*	Mason (average)	Day	0.60	₹ 400.00	₹ 240.00
0203	Beldar	Day	0.60	₹ 300.00	₹ 180.00
	Solution of lime putty	@	5.00%	₹ 420.00	₹ 21.00
	Add for sundries and contingencies	@	3.00%	₹ 441.00	₹ 13.23
	Add for contractor's profit and overheads	@	15.00%	₹ 454.23	₹ 68.13
	Cost of 10 sqm.				₹ 522.36
	Cost of 1 Sqm.				₹ 52.24
	Say				₹ 52.20

Plain Cement Mortar Bands					
12.16	12 mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) in single layer :				

12.16.1	Flush Band				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				
	Materials:-				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.014	₹ 3,184.67	₹ 44.59

	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.27	₹ 400.00	₹ 108.00
0212	Coolie	Day	0.27	₹ 300.00	₹ 81.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 248.59	₹ 24.86
	Add for water charges	@	1.00%	₹ 273.45	₹ 2.73
	Add for sundries and contingencies	@	3.00%	₹ 276.18	₹ 8.29
	Add for contractor's profit and overheads	@	15.00%	₹ 284.47	₹ 42.67
	Cost of 10metre.long, 10cm wide band				₹ 327.14
	Cost of 1metre.long, 1cm wide band				₹ 3.27
	Say				₹ 3.30

12.16.2 Sunk Band					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				
	Materials:-				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.014	₹ 3,184.67	₹ 44.59
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.30	₹ 400.00	₹ 120.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 269.59	₹ 26.96
	Add for water charges	@	1.00%	₹ 296.55	₹ 2.97
	Add for sundries and contingencies	@	3.00%	₹ 299.52	₹ 8.99
	Add for contractor's profit and overheads	@	15.00%	₹ 308.51	₹ 46.28
	Cost of 100 Metre.cm				₹ 354.79
	Cost of 1metre.long, 1cm wide band				₹ 3.55
	Say				₹ 3.60

12.16.3 Raised Band					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				
	Materials:-				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.014	₹ 3,184.67	₹ 44.59
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.35	₹ 400.00	₹ 140.00
0212	Coolie	Day	0.35	₹ 300.00	₹ 105.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 304.59	₹ 30.46
	Add for water charges	@	1.00%	₹ 335.05	₹ 3.35
	Add for sundries and contingencies	@	3.00%	₹ 338.40	₹ 10.15
	Add for contractor's profit and overheads	@	15.00%	₹ 348.55	₹ 52.28
	Cost of 100 Metre.cm				₹ 400.83
	Cost of 1metre.long, 1cm wide band				₹ 4.01
	Say				₹ 4.00

12.16.4 Moulded Band					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				

	Materials:-				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.014	₹ 3,184.67	₹ 44.59
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.65	₹ 400.00	₹ 260.00
0212	Coolie	Day	0.65	₹ 300.00	₹ 195.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 514.59	₹ 51.46
	Add for water charges	@	1.00%	₹ 566.05	₹ 5.66
	Add for sundries and contingencies	@	3.00%	₹ 571.71	₹ 17.15
	Add for contractor's profit and overheads	@	15.00%	₹ 588.86	₹ 88.33
	Cost of 100 Metre.cm				₹ 677.19
	Cost of 1metre.long, 1cm wide band				₹ 6.77
	Say				₹ 6.80

12.17	18 mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) in single layer :				
12.17.1	Flush Band				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				
	Materials:-				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.02	₹ 3,184.67	₹ 63.69
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.32	₹ 400.00	₹ 128.00
0212	Coolie	Day	0.32	₹ 300.00	₹ 96.00
0205	Bhisti	Day	0.06	₹ 300.00	₹ 18.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 305.69	₹ 30.57
	Add for water charges	@	1.00%	₹ 336.26	₹ 3.36
	Add for sundries and contingencies	@	3.00%	₹ 339.62	₹ 10.19
	Add for contractor's profit and overheads	@	15.00%	₹ 349.81	₹ 52.47
	Cost of 10metre.long, 10cm wide band				₹ 402.28
	Cost of 1metre.long, 1cm wide band				₹ 4.02
	Say				₹ 4.00

12.17.2	Sunk Band				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				
	Materials:-				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.02	₹ 3,184.67	₹ 63.69
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.36	₹ 400.00	₹ 144.00
0212	Coolie	Day	0.36	₹ 300.00	₹ 108.00
0205	Bhisti	Day	0.06	₹ 300.00	₹ 18.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 333.69	₹ 33.37
	Add for water charges	@	1.00%	₹ 367.06	₹ 3.67
	Add for sundries and contingencies	@	3.00%	₹ 370.73	₹ 11.12
	Add for contractor's profit and overheads	@	15.00%	₹ 381.85	₹ 57.28
	Cost of 100 Metre.cm				₹ 439.13

	Cost of 1metre.long, 1cm wide band				₹ 4.39
	Say				₹ 4.40

12.17.3 Raised Band					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				
	Materials:-				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.02	₹ 3,184.67	₹ 63.69
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.42	₹ 400.00	₹ 168.00
0212	Coolie	Day	0.42	₹ 300.00	₹ 126.00
0205	Bhisti	Day	0.06	₹ 300.00	₹ 18.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 375.69	₹ 37.57
	Add for water charges	@	1.00%	₹ 413.26	₹ 4.13
	Add for sundries and contingencies	@	3.00%	₹ 417.39	₹ 12.52
	Add for contractor's profit and overheads	@	15.00%	₹ 429.91	₹ 64.49
	Cost of 100 Metre.cm				₹ 494.40
	Cost of 1metre.long, 1cm wide band				₹ 4.94
	Say				₹ 4.90

12.17.4 Moulded Band					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				
	Materials:-				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.024	₹ 3,184.67	₹ 76.43
	(Rate as per item no. 3.4)				
	Labour:-				
0218*	Mason (average)	Day	0.86	₹ 400.00	₹ 344.00
0212	Coolie	Day	0.86	₹ 300.00	₹ 258.00
0205	Bhisti	Day	0.06	₹ 300.00	₹ 18.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 696.43	₹ 69.64
	Add for water charges	@	1.00%	₹ 766.07	₹ 7.66
	Add for sundries and contingencies	@	3.00%	₹ 773.73	₹ 23.21
	Add for contractor's profit and overheads	@	15.00%	₹ 796.94	₹ 119.54
	Cost of 100 Metre.cm				₹ 916.48
	Cost of 1metre.long, 1cm wide band				₹ 9.16
	Say				₹ 9.20

12.18 Providing 18 mm thick moulded cement mortar bands in two layers, under layer 12 mm thick with cement mortar 1:5 (1 cement : 5 fine sand) and top layer 6 mm thick with cement mortar 1:4 (1 cement : 4 fine sand) complete.					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10metre.long, 10cm wide band				
	Materials:-				
	12mm. thick Cement mortar 1 : 5 (1 cement : 5 fine sand) excluding labour and other additions.	Cum	0.014	₹ 2,749.90	₹ 38.50
	(Rate as per item no. 3.5)				
	12mm. thick Cement mortar 1 : 4 (1 cement : 4 fine sand) excluding labour and other additions.	Cum	0.01	₹ 3,184.67	₹ 31.85
	(Rate as per item no. 3.4)				

	Labour:-				
0218*	Mason (average)	Day	0.86	₹ 400.00	₹ 344.00
0212	Coolie	Day	0.86	₹ 300.00	₹ 258.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add for cost of scaffolding, pumps for water etc.	@	10.00%	₹ 687.35	₹ 68.74
	Add for water charges	@	1.00%	₹ 756.09	₹ 7.56
	Add for sundries and contingencies	@	3.00%	₹ 763.65	₹ 22.91
	Add for contractor's profit and overheads	@	15.00%	₹ 786.56	₹ 117.98
	Cost of 100 Metre.cm				₹ 904.54
	Cost of 1metre.long, 1cm wide band				₹ 9.05
	Say				₹ 9.10

Pointing of Brick work					
12.19	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand) complete.				
12.19.1	Flush/ruled/Stuck or weathered Pointing				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
	Cement mortar 1 : 3 (1 cement : 3 fine sand) excluding labour and other additions.	Cum	0.030	₹ 3,992.09	₹ 119.76
	(Rate as per item no. 3.3)				
	Labour:-				
0218*	Mason (average)	Day	0.50	₹ 400.00	₹ 200.00
0212	Coolie	Day	0.60	₹ 300.00	₹ 180.00
0205	Bhisti	Day	0.93	₹ 300.00	₹ 279.00
	Add for scaffolding and pumps for water, lift etc.	@	8.00%	₹ 778.76	₹ 62.30
	Add for water charges	@	1.00%	₹ 841.06	₹ 8.41
	Add for sundries and contingencies	@	3.00%	₹ 849.47	₹ 25.48
	Add for contractor's profit and overheads	@	15.00%	₹ 874.95	₹ 131.24
	Cost of 10 Sqm				₹ 1,006.19
	Cost of 1 Sqm				₹ 100.62
	Say				₹ 100.60

12.19.2	Raised and cut Pointing				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Materials:-				
	Cement mortar 1 : 3 (1 cement : 3 fine sand) excluding labour and other additions.	Cum	0.046	₹ 3,992.09	₹ 183.64
	(Rate as per item no. 3.3)				
	Labour:-				
0218*	Mason (average)	Day	1.07	₹ 400.00	₹ 428.00
0212	Coolie	Day	1.31	₹ 300.00	₹ 393.00
0205	Bhisti	Day	1.00	₹ 300.00	₹ 300.00
	Add for scaffolding and pumps for water, lift etc.	@	8.00%	₹ 1,304.64	₹ 104.37
	Add for water charges	@	1.00%	₹ 1,409.01	₹ 14.09
	Add for sundries and contingencies	@	3.00%	₹ 1,423.10	₹ 42.69
	Add for contractor's profit and overheads	@	15.00%	₹ 1,465.79	₹ 219.87
	Cost of 10 Sqm				₹ 1,685.66
	Cost of 1 Sqm				₹ 168.57
	Say				₹ 168.60

12.20	Extra for pointing in brick work on exterior walls at height more than 10 m from ground level for every additional height of 3 m or part thereof complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 Sqm				
	Labour:-				

0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0218*	Mason (average)	Day	0.08	₹ 400.00	₹ 32.00
0212	Coolie	Day	0.08	₹ 300.00	₹ 24.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add for scaffolding and pumps for water, lift etc.	@	1.00%	₹ 74.00	₹ 0.74
	Add for water charges	@	1.00%	₹ 74.74	₹ 0.75
	Add for sundries and contingencies	@	3.00%	₹ 75.49	₹ 2.26
	Add for contractor's profit and overheads	@	15.00%	₹ 77.75	₹ 11.66
	Cost of 10 Sqm				₹ 89.41
	Cost of 1 Sqm				₹ 8.94
	Say				₹ 8.90

Interior and Exterior Finishing					
12.21	White washing with lime to give an even shade New work (three or more coats).				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm	Sqm.			
	Materials:-				
12017	Dehradun white lime	Kg	3.00	₹ 7.50	₹ 22.50
0455	Carriage of white lime	tonne	0.003	₹ 124.80	₹ 0.37
12025	Indigo	Kg	0.009	₹ 65.00	₹ 0.59
	Labour:-				
0223	White Washer	Day	0.20	₹ 340.00	₹ 68.00
0212	Coolie	Day	0.20	₹ 300.00	₹ 60.00
	Add cost of Gum, putty, brushes etc.	@	6.00%	₹ 151.46	₹ 9.09
	Add cost of scaffolding etc.	@	4.00%	₹ 160.55	₹ 6.42
	Add for water charges	@	1.50%	₹ 166.97	₹ 2.50
	Add for sundries and contingencies	@	3.00%	₹ 169.47	₹ 5.08
	Add for contractor's profit and overheads	@	15.00%	₹ 174.55	₹ 26.18
	Cost of 10 sqm.				₹ 200.73
	Rate per sqm.				₹ 20.07
	Say				₹ 20.10

12.22	Colour washing such as green, blue or buff with whiting to give an even shade on new work (two or more coats) complete.				
12.22.1	With a base coat of white washing with lime				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12017	Dehradun white lime	Kg	3.00	₹ 7.50	₹ 22.50
12012	Colouring material : 10% of 3.00 Kg. = 0.3 Kg.	Kg	0.30	₹ 75.00	₹ 22.50
0455	Carriage of white lime & colouring material	tonne	0.0033	₹ 124.80	₹ 0.41
	Labour:-				
0223	White Washer	Day	0.30	₹ 340.00	₹ 102.00
0212	Coolie	Day	0.10	₹ 300.00	₹ 30.00
	Add cost of Gum, Putty, Brushes, Colouring stuff etc.	@	6.00%	₹ 177.41	₹ 10.64
	Add cost of scaffolding, pumps for water etc.	@	4.00%	₹ 188.05	₹ 7.52
	Add for water charges	@	1.00%	₹ 195.57	₹ 1.96
	Add for sundries and contingencies	@	3.00%	₹ 197.53	₹ 5.93
	Add for contractor's profit and overheads	@	15.00%	₹ 203.46	₹ 30.52
	Cost of 10 sqm.				₹ 233.98
	Cost of 1 Sqm.				₹ 23.40
	Say				₹ 23.40

12.22.2	With a base coat of whiting				
Code	Description	Unit	Quantity	Rate	Amount

	Detail of cost for 10 sqm				
	Materials:-				
12046	Whiting	Kg	3.00	₹ 6.50	₹ 19.50
12012	Colouring material : 10% of 3.00 Kg. = 0.03 Kg.	Kg	0.30	₹ 75.00	₹ 22.50
0455	Carriage of whiting & colouring material	tonne	0.0033	₹ 124.80	₹ 0.41
	Labour:-				
0223	White Washer	Day	0.30	₹ 340.00	₹ 102.00
0212	Coolie	Day	0.10	₹ 300.00	₹ 30.00
	Add cost of Gum, Putty, Brushes, Colouring stuff etc.	@	6.00%	₹ 174.41	₹ 10.46
	Add cost of scaffolding, pumps for water etc.	@	4.00%	₹ 184.87	₹ 7.39
	Add for water charges	@	1.00%	₹ 192.26	₹ 1.92
	Add for sundries and contingencies	@	3.00%	₹ 194.18	₹ 5.83
	Add for contractor's profit and overheads	@	15.00%	₹ 200.01	₹ 30.00
	Cost of 10 sqm.				₹ 230.01
	Cost of 1 Sqm.				₹ 23.00
	Say				₹ 23.00

12.23	Distempering with dry distemper of approved brand and manufacture (two or more coats) of required shade on new work, over and including water thinnable priming coat to give an even shade. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12049	Water thinnable cement primer for interior wall surface, having VOC content less than 50 grams/ litre	litre	0.70	₹ 60.00	₹ 42.00
12018	Dry distemper	Kg	1.50	₹ 35.00	₹ 52.50
	Labour:-				
0227	Painter	Day	0.80	₹ 340.00	₹ 272.00
0212	Coolie	Day	0.40	₹ 300.00	₹ 120.00
	Add cost of Putty, glue, brushes, copper sulphate, sand paper etc. pumps for water including carriage of dry distemper and whiting.	@	30.00%	₹ 486.50	₹ 145.95
	Add cost of scaffolding, ladder etc.	@	3.00%	₹ 632.45	₹ 18.97
	Add for water charges	@	1.00%	₹ 651.42	₹ 6.51
	Add for sundries and contingencies	@	3.00%	₹ 657.93	₹ 19.74
	Add for contractor's profit and overheads	@	15.00%	₹ 677.67	₹ 101.65
	Cost of 10 sqm.				₹ 737.32
	Cost of 1 Sqm.				₹ 73.73
	Say				₹ 73.70

12.24	Distempering with oil bound washable distemper of approved brand and manufacture and of required shade on new work (two or more coats), over and including water thinnable priming coat to give an even shade. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12049	Water thinnable cement primer for interior wall surface, having VOC content less than 50 grams/ litre	litre	0.70	₹ 60.00	₹ 42.00
12027	Oil bound washable distemper/ Acrylic distemper	Kg	1.50	₹ 52.00	₹ 78.00
	Labour:-				
0227	Painter	Day	1.00	₹ 340.00	₹ 340.00
0212	Coolie	Day	0.50	₹ 300.00	₹ 150.00

	Add cost of Brushes, sand paper, putty for filling, pumps for water etc including carriage of oil bound distemper and cement primer.	@	30.00%	₹ 610.00	₹ 183.00
	Add cost of scaffolding, ladder etc.	@	2.00%	₹ 793.00	₹ 15.86
	Add for water charges	@	1.00%	₹ 808.86	₹ 8.09
	Add for sundries and contingencies	@	3.00%	₹ 816.95	₹ 24.51
	Add for contractor's profit and overheads	@	15.00%	₹ 841.46	₹ 126.22
	Cost of 10 sqm.				₹ 925.68
	Cost of 1 Sqm.				₹ 92.57
	Say				₹ 92.60

12.25	Distemping with 1st quality acrylic washable distemper (ready mixed) of approved brand and manufacture and of required shade and colour complete as per manufacturer's specification on new work (two or more coats). [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12027	Oil bound washable distemper/ Acrylic distemper	Kg	1.50	₹ 52.00	₹ 78.00
	Labour:-				
0227	Painter	Day	0.40	₹ 340.00	₹ 136.00
0212	Belder	Day	0.46	₹ 300.00	₹ 138.00
	Add cost of scaffolding, Putty for filling, brushes, sand paper etc. pumps for water including carriage of distemper and cement primer.	@	30.00%	₹ 352.00	₹ 105.60
	Add for water charges	@	1.00%	₹ 457.60	₹ 4.58
	Add for sundries and contingencies	@	3.00%	₹ 462.18	₹ 13.87
	Add for contractor's profit and overheads	@	15.00%	₹ 476.05	₹ 71.41
	Cost of 10 sqm.				₹ 547.46
	Cost of 1 Sqm.				₹ 54.75
	Say				₹ 54.80

12.26	Distemping with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.26.1	One Coat				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12002	Acrylic distemper 1st quality having VOC content less than 50 gm / litre	Kg	0.62	₹ 45.00	₹ 27.90
	Labour:-				
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Belder	Day	0.20	₹ 300.00	₹ 60.00
	Add cost of scaffolding, Putty for filling, brushes, sand paper etc. pumps for water including carriage of distemper and cement primer.	@	30.00%	₹ 206.90	₹ 62.07
	Add for water charges	@	1.00%	₹ 268.97	₹ 2.69
	Add for sundries and contingencies	@	3.00%	₹ 271.66	₹ 8.15
	Add for contractor's profit and overheads	@	15.00%	₹ 279.81	₹ 41.97
	Cost of 10 sqm.				₹ 321.78
	Cost of 1 Sqm.				₹ 32.18
	Say				₹ 32.20

12.26.2	Two Coats				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				

	Materials:-				
12002	Acrylic distemper 1st quality having VOC content less than 50 gm / litre	Kg	0.99	₹ 45.00	₹ 44.55
	Labour:-				
0227	Painter	Day	0.40	₹ 340.00	₹ 136.00
0212	Belder	Day	0.46	₹ 300.00	₹ 138.00
	Add cost of scaffolding, Putty for filling, brushes, sand paper etc. pumps for water including carriage of distemper and cement primer.	@	30.00%	₹ 318.55	₹ 95.57
	Add for water charges	@	1.00%	₹ 414.12	₹ 4.14
	Add for sundries and contingencies	@	3.00%	₹ 418.26	₹ 12.55
	Add for contractor's profit and overheads	@	15.00%	₹ 430.81	₹ 64.62
	Cost of 10 sqm.				₹ 495.43
	Cost of 1 Sqm.				₹ 49.54
	Say				₹ 49.50

12.27	Applying one coat of water thinnable cement primer of approved brand and manufacturer on wall surface complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12049	Water thinnable cement primer for interior wall surface, having VOC content less than 50 grams/ litre	Litre	0.70	₹ 60.00	₹ 42.00
	Labour:-				
0227	Painter	Day	0.40	₹ 340.00	₹ 136.00
0212	Coolie	Day	0.20	₹ 300.00	₹ 60.00
	Add cost of Putty for filling, brushes, sand paper etc.	@	15.00%	₹ 238.00	₹ 35.70
	Add cost of scaffolding, carriage of materials, ladder, pump for water etc.	@	4.00%	₹ 273.70	₹ 10.95
	Add for water charges	@	1.00%	₹ 284.65	₹ 2.85
	Add for sundries and contingencies	@	3.00%	₹ 287.50	₹ 8.63
	Add for contractor's profit and overheads	@	15.00%	₹ 296.13	₹ 44.42
	Cost of 10 sqm.				₹ 340.55
	Cost of 1 Sqm.				₹ 34.06
	Say				₹ 34.10

12.28	Finishing walls with water proofing cement paint of required shade of approved brand and manufacture on new work (two or more coats applied @ 3.84 kg/10 sqm) complete. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12043	Water proofing cement paint	Kg	3.84	₹ 44.00	₹ 168.96
	Labour:-				
0227	Painter	Day	0.46	₹ 340.00	₹ 156.40
0212	Coolie	Day	0.23	₹ 300.00	₹ 69.00
0205	Bhisti	Day	0.10	₹ 300.00	₹ 30.00
	Add cost of Putty for filling, brushes etc. and pumps for water including carriage of water proofing cement paint.	@	2.00%	₹ 424.36	₹ 8.49
	Add cost of scaffolding, ladder etc.	@	3.00%	₹ 432.85	₹ 12.99
	Add for water charges	@	1.00%	₹ 445.84	₹ 4.46
	Add for sundries and contingencies	@	3.00%	₹ 450.30	₹ 13.51
	Add for contractor's profit and overheads	@	15.00%	₹ 463.81	₹ 69.57
	Cost of 10 sqm.				₹ 533.38
	Cost of 1 Sqm.				₹ 53.34
	Say				₹ 53.30

12.29	Finishing walls with textured exterior paint of required shade of approved brand and manufacture on new work (two or more coats applied @ 3.28 litre/10 sqm) over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm complete. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12042	Textured exterior paint	Litre	3.28	₹ 245.00	₹ 803.60
12050	Exterior primer	Kg	2.20	₹ 55.00	₹ 121.00
	Labour:-				
0227	Painter	Day	0.60	₹ 340.00	₹ 204.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add cost of Putty for filling, brushes etc. and pumps for water including carriage of textured exterior paint and primer	@	2.00%	₹ 1,233.60	₹ 24.67
	Add cost of scaffolding, ladder etc.	@	3.00%	₹ 1,258.27	₹ 37.75
	Add for water charges	@	1.00%	₹ 1,296.02	₹ 12.96
	Add for sundries and contingencies	@	3.00%	₹ 1,308.98	₹ 39.27
	Add for contractor's profit and overheads	@	15.00%	₹ 1,348.25	₹ 202.24
	Cost of 10 sqm.				₹ 1,550.49
	Cost of 1 Sqm.				₹ 155.05
	Say				₹ 155.10

12.30	Finishing walls with acrylic smooth exterior paint of required shade of approved brand and manufacture on new work (two or more coats applied @ 1.67 litre/10 sqm) over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm complete. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12004	Acrylic exterior paint	Litre	1.67	₹ 185.00	₹ 308.95
12050	Exterior primer	Kg	2.20	₹ 55.00	₹ 121.00
	Labour:-				
0227	Painter	Day	0.60	₹ 340.00	₹ 204.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add cost of Putty for filling, brushes etc. and pumps for water including carriage of acrylic exterior paint and water proofing cement paint.	@	2.00%	₹ 738.95	₹ 14.78
	Add cost of scaffolding, ladder etc.	@	3.00%	₹ 753.73	₹ 22.61
	Add for water charges	@	1.00%	₹ 776.34	₹ 7.76
	Add for sundries and contingencies	@	3.00%	₹ 784.10	₹ 23.52
	Add for contractor's profit and overheads	@	15.00%	₹ 807.62	₹ 121.14
	Cost of 10 sqm.				₹ 928.76
	Cost of 1 Sqm.				₹ 92.88
	Say				₹ 92.90

12.31	Finishing walls with premium acrylic smooth exterior paint of required shade of approved brand and manufacture on new work (two or more coats applied @ 1.43 litre/10 sqm) over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm complete. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12033	Premium Acrylic smooth exterior paint	Litre	1.43	₹ 218.00	₹ 311.74
12050	Exterior primer	Kg	2.20	₹ 55.00	₹ 121.00
	Labour:-				
0227	Painter	Day	0.60	₹ 340.00	₹ 204.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00

	Add cost of Putty for filling, brushes etc. and pumps for water including carriage of premium Acrylic exterior paint and water proofing cement paint.	@	2.00%	₹ 741.74	₹ 14.83
	Add cost of scaffolding, ladder etc.	@	3.00%	₹ 756.57	₹ 22.70
	Add for water charges	@	1.00%	₹ 779.27	₹ 7.79
	Add for sundries and contingencies	@	3.00%	₹ 787.06	₹ 23.61
	Add for contractor's profit and overheads	@	15.00%	₹ 810.67	₹ 121.60
	Cost of 10 sqm.				₹ 932.27
	Cost of 1 Sqm.				₹ 93.23
	Say				₹ 93.20

12.32	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications : [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.32.1	Two or more coats applied on walls @ 1.25 ltr/10 sqm over and including one coat of Special primer applied @ 0.75 ltr /10 sqm				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12051	Multi Surface Paint	Litre	1.25	₹ 275.00	₹ 343.75
12052	Special primer (C.W.)	Kg	0.75	₹ 160.00	₹ 120.00
	Labour:-				
0227	Painter	Day	0.60	₹ 340.00	₹ 204.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add cost of brushes, sand paper etc. and pumps for water including carriage.	@	5.00%	₹ 772.75	₹ 38.64
	Add cost of scaffolding, ladder etc.	@	3.00%	₹ 811.39	₹ 24.34
	Add for water charges	@	1.00%	₹ 835.73	₹ 8.36
	Add for sundries and contingencies	@	3.00%	₹ 844.09	₹ 25.32
	Add for contractor's profit and overheads	@	15.00%	₹ 869.41	₹ 130.41
	Cost of 10 sqm.				₹ 999.82
	Cost of 1 Sqm.				₹ 99.98
	Say				₹ 100.00

12.32.2	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/10 sqm of approved brand and manufacture				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12051	Multi Surface Paint	Litre	0.90	₹ 275.00	₹ 247.50
12052	Special primer (C.W.)	Kg	0.75	₹ 160.00	₹ 120.00
	Labour:-				
0227	Painter	Day	0.60	₹ 340.00	₹ 204.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add cost of brushes, sand paper etc. and pumps for water including carriage.	@	5.00%	₹ 676.50	₹ 33.83
	Add cost of scaffolding, ladder etc.	@	3.00%	₹ 710.33	₹ 21.31
	Add for water charges	@	1.00%	₹ 731.64	₹ 7.32
	Add for sundries and contingencies	@	3.00%	₹ 738.96	₹ 22.17
	Add for contractor's profit and overheads	@	15.00%	₹ 761.13	₹ 114.17
	Cost of 10 sqm.				₹ 875.30
	Cost of 1 Sqm.				₹ 87.53
	Say				₹ 87.50

12.32.3	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand and manufacture				

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12051	Multi Surface Paint	Litre	0.90	₹ 275.00	₹ 247.50
12052	Special primer (C.W.)	Kg	0.80	₹ 160.00	₹ 128.00

	Labour:-				
0227	Painter	Day	0.60	₹ 340.00	₹ 204.00
0212	Coolie	Day	0.30	₹ 300.00	₹ 90.00
0205	Bhisti	Day	0.05	₹ 300.00	₹ 15.00
	Add cost of brushes, sand paper etc. and pumps for water including carriage.	@	5.00%	₹ 684.50	₹ 34.23
	Add cost of scaffolding, ladder etc.	@	3.00%	₹ 718.73	₹ 21.56
	Add for water charges	@	1.00%	₹ 740.29	₹ 7.40
	Add for sundries and contingencies	@	3.00%	₹ 747.69	₹ 22.43
	Add for contractor's profit and overheads	@	15.00%	₹ 770.12	₹ 115.52
	Cost of 10 sqm.				₹ 885.64
	Cost of 1 Sqm.				₹ 88.56
	Say				₹ 88.60

12.33	Applying priming coat: [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.33.1	With ready mixed Pink or Grey primer of approved brand and manufacture on wood work (hard & soft wood).				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12030	Pink Primer	Litre	0.75	₹ 94.00	₹ 70.50
	Labour:-				
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
0212	Coolie	Day	0.25	₹ 300.00	₹ 75.00
	Add cost of Putty for filling, brushes etc. including carriage of primer	@	10.00%	₹ 230.50	₹ 23.05
	Add cost of scaffolding, ladder etc.	@	5.00%	₹ 253.55	₹ 12.68
	Add for water charges	@	1.00%	₹ 266.23	₹ 2.66
	Add for sundries and contingencies	@	3.00%	₹ 268.89	₹ 8.07
	Add for contractor's profit and overheads	@	15.00%	₹ 276.96	₹ 41.54
	Cost of 10 sqm.				₹ 318.50
	Cost of 1 Sqm.				₹ 31.85
	Say				₹ 31.90

12.33.2	With ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12006	Aluminium primer	Litre	0.75	₹ 95.00	₹ 71.25
	Labour:-				
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
0212	Coolie	Day	0.25	₹ 300.00	₹ 75.00
	Add cost of brushes, sand paper etc. including carriage of aluminium primer	@	10.00%	₹ 231.25	₹ 23.13
	Add cost of scaffolding, ladder etc.	@	6.00%	₹ 254.38	₹ 15.26
	Add for water charges	@	1.00%	₹ 269.64	₹ 2.70
	Add for sundries and contingencies	@	3.00%	₹ 272.34	₹ 8.17
	Add for contractor's profit and overheads	@	15.00%	₹ 280.51	₹ 42.08
	Cost of 10 sqm.				₹ 322.59
	Cost of 1 Sqm.				₹ 32.26
	Say				₹ 32.30

12.33.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel, galvanised iron / steel work.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12001	Red oxide Zinc chromate primer	Litre	0.54	₹ 75.00	₹ 40.50

	Labour:-				
0227	Painter	Day	0.24	₹ 340.00	₹ 81.60
0212	Coolie	Day	0.24	₹ 300.00	₹ 72.00
	Add cost of brushes, sand paper etc. and pumps for water including carriage of primer.	@	10.00%	₹ 194.10	₹ 19.41
	Add cost of scaffolding, ladder etc.	@	5.00%	₹ 213.51	₹ 10.68
	Add for water charges	@	1.00%	₹ 224.19	₹ 2.24
	Add for sundries and contingencies	@	3.00%	₹ 226.43	₹ 6.79
	Add for contractor's profit and overheads	@	15.00%	₹ 233.22	₹ 34.98
	Cost of 10 sqm.				₹ 268.20
	Cost of 1 Sqm.				₹ 26.82
	Say				₹ 26.80

12.33.4	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel , galvanised iron / steel work (2nd coat).				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12001	Red oxide Zinc chromate primer	Litre	0.36	₹ 75.00	₹ 27.00
	Labour:-				
0227	Painter	Day	0.12	₹ 340.00	₹ 40.80
0212	Coolie	Day	0.12	₹ 300.00	₹ 36.00
	Add cost of brushes, sand paper etc. and pumps for water including carriage of primer.	@	10.00%	₹ 103.80	₹ 10.38
	Add for water charges	@	1.00%	₹ 114.18	₹ 1.14
	Add for sundries and contingencies	@	3.00%	₹ 115.32	₹ 3.46
	Add for contractor's profit and overheads	@	15.00%	₹ 118.78	₹ 17.82
	Cost of 10 sqm.				₹ 136.60
	Cost of 1 Sqm.				₹ 13.66
	Say				₹ 13.70

12.34	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.34.1	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12053	Ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	Litre	0.75	₹ 135.00	₹ 101.25
	Labour:-				
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
0212	Coolie	Day	0.25	₹ 300.00	₹ 75.00
	Add cost of Putty for filling, brushes etc. including carriage of primer	@	10.00%	₹ 261.25	₹ 26.13
	Add cost of scaffolding, ladder etc.	@	5.00%	₹ 287.38	₹ 14.37
	Add for water charges	@	1.00%	₹ 301.75	₹ 3.02
	Add for sundries and contingencies	@	3.00%	₹ 304.77	₹ 9.14
	Add for contractor's profit and overheads	@	15.00%	₹ 313.91	₹ 47.09
	Cost of 10 sqm.				₹ 361.00
	Cost of 1 Sqm.				₹ 36.10
	Say				₹ 36.10

12.34.2	With ready mixed red oxide zinc chromatic on steel / iron works having VOC content less than 250 grams/ litre				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				

	Materials:-				
12054	Ready mixed red oxide zinc chromatic on steel / iron works having VOC content less than 250 grams/ litre	Litre	0.54	₹ 130.00	₹ 70.20
	Labour:-				
0227	Painter	Day	0.24	₹ 340.00	₹ 81.60
0203	Coolie	Day	0.24	₹ 300.00	₹ 72.00
	Add cost of brushes, sand paper etc. including carriage of primer	@	10.00%	₹ 223.80	₹ 22.38
	Add cost of scaffolding, ladder etc.	@	6.00%	₹ 246.18	₹ 14.77
	Add for water charges	@	1.00%	₹ 260.95	₹ 2.61
	Add for sundries and contingencies	@	3.00%	₹ 263.56	₹ 7.91
	Add for contractor's profit and overheads	@	15.00%	₹ 271.47	₹ 40.72
	Cost of 10 sqm.				₹ 312.19
	Cost of 1 Sqm.				₹ 31.22
	Say				₹ 31.20

12.34.3	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12055	Water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	Litre	0.70	₹ 67.00	₹ 46.90
	Labour:-				
0227	Painter	Day	0.40	₹ 340.00	₹ 136.00
0203	Coolie	Day	0.20	₹ 300.00	₹ 60.00
	Add cost of brushes, sand paper, putty etc. and pumps for water including carriage of primer.	@	10.00%	₹ 242.90	₹ 24.29
	Add cost of scaffolding, ladder etc.	@	5.00%	₹ 267.19	₹ 13.36
	Add for water charges	@	1.00%	₹ 280.55	₹ 2.81
	Add for sundries and contingencies	@	3.00%	₹ 283.36	₹ 8.50
	Add for contractor's profit and overheads	@	15.00%	₹ 291.86	₹ 43.78
	Cost of 10 sqm.				₹ 335.64
	Cost of 1 Sqm.				₹ 33.56
	Say				₹ 33.60

12.35	Painting with silicon & acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces : [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.35.1	One coat				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12056	Silicon and acrylic emulsion	litre	1.80	₹ 150.00	₹ 270.00
	Labour:-				
0227	Painter	Day	0.27	₹ 340.00	₹ 91.80
0203	Coolie	Day	0.27	₹ 300.00	₹ 81.00
	Add cost of Putty for filling, brushes etc. and pumps for water including carriage	@	7.00%	₹ 442.80	₹ 31.00
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 473.80	₹ 18.95
	Add for water charges	@	1.00%	₹ 492.75	₹ 4.93
	Add for sundries and contingencies	@	3.00%	₹ 497.68	₹ 14.93
	Add for contractor's profit and overheads	@	15.00%	₹ 512.61	₹ 76.89
	Cost of 10 sqm.				₹ 589.50
	Cost of 1 Sqm.				₹ 58.95
	Say				₹ 59.00

12.35.2	Two coats				
Code	Description	Unit	Quantity	Rate	Amount

	Detail of cost for 10 sqm				
	Materials:-				
12056	Silicon and acrylic emulsion	litre	2.88	₹ 150.00	₹ 432.00
0	Labour:-				
0227	Painter	Day	0.45	₹ 340.00	₹ 153.00
0203	Coolie	Day	0.45	₹ 300.00	₹ 135.00
	Add cost of Putty for filling, brushes etc. and pumps for water including carriage	@	7.00%	₹ 720.00	₹ 50.40
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 770.40	₹ 30.82
	Add for water charges	@	1.00%	₹ 801.22	₹ 8.01
	Add for sundries and contingencies	@	3.00%	₹ 809.23	₹ 24.28
	Add for contractor's profit and overheads	@	15.00%	₹ 833.51	₹ 125.03
	Cost of 10 sqm.				₹ 958.54
	Cost of 1 Sqm.				₹ 95.85
	Say				₹ 95.90

12.36	Finishing with epoxy paint (two or more coats) of approved brand and manufacture at all locations prepared and applied as per manufacturer's specification on new work including appropriate priming coat, preparation of surface etc. complete. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.36.1	On steel work				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12001	Red oxide Zinc chromate primer	Litre	0.75	₹ 75.00	₹ 56.25
12020	Epoxy paint	Litre	1.25	₹ 250.00	₹ 312.50
	Labour:-				
0227	Painter	Day	0.79	₹ 340.00	₹ 268.60
0212	Coolie	Day	0.79	₹ 300.00	₹ 237.00
	Add cost of Putty for filling, brushes, sand paper etc. and pumps for water including carriage of primer and paint.	@	5.00%	₹ 874.35	₹ 43.72
	Add cost of scaffolding, ladder etc.	@	2.00%	₹ 918.07	₹ 18.36
	Add for water charges	@	1.00%	₹ 936.43	₹ 9.36
	Add for sundries and contingencies	@	3.00%	₹ 945.79	₹ 28.37
	Add for contractor's profit and overheads	@	15.00%	₹ 974.16	₹ 146.12
	Cost of 10 sqm.				₹ 1,120.28
	Cost of 1 Sqm.				₹ 112.03
	Say				₹ 112.00

12.36.2	On concrete work				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12034	Distemper Primer	Litre	0.84	₹ 70.00	₹ 58.80
12020	Epoxy paint	Litre	1.21	₹ 250.00	₹ 302.50
	Labour:-				
0227	Painter	Day	0.79	₹ 340.00	₹ 268.60
0212	Coolie	Day	0.79	₹ 300.00	₹ 237.00
	Add cost of Putty for filling, brushes, sand paper etc. and pumps for water including carriage of primer and paint.	@	10.00%	₹ 866.90	₹ 86.69
	Add cost of scaffolding, ladder etc.	@	5.00%	₹ 953.59	₹ 47.68
	Add for water charges	@	1.00%	₹ 1,001.27	₹ 10.01
	Add for sundries and contingencies	@	3.00%	₹ 1,011.28	₹ 30.34
	Add for contractor's profit and overheads	@	15.00%	₹ 1,041.62	₹ 156.24
	Cost of 10 sqm.				₹ 1,197.86
	Cost of 1 Sqm.				₹ 119.79
	Say				₹ 119.80

12.37	Painting on G.S. sheet with synthetic enamel paint (two or more coats) of approved brand and manufacture of required colour to give an even shade on new work including a coat of appropriate steel primer but excluding a coat of mordant solution complete. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12001	Red oxide Zinc chromate primer	Litre	0.36	₹ 75.00	₹ 27.00
12040	Synthetic enamel paint in all shades except black or chocolate shade	Litre	0.80	₹ 155.00	₹ 124.00
	Labour:-				
0227	Painter	Day	0.66	₹ 340.00	₹ 224.40
0203	Beldar	Day	0.12	₹ 300.00	₹ 36.00
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of paint, ladders, cost of brushes etc.	@	2.00%	₹ 573.40	₹ 11.47
	Add for water charges	@	1.00%	₹ 584.87	₹ 5.85
	Add for sundries and contingencies	@	3.00%	₹ 584.87	₹ 17.55
	Add for contractor's profit and overheads	@	15.00%	₹ 602.42	₹ 90.36
	Cost of 10 sqm.				₹ 698.63
	Cost of 1 Sqm.				₹ 69.86
	Say				₹ 69.90

12.38	Applying a coat of mordant solution on G.S. sheet on new work complete:				
12.38.1	With a solution made of 38 gms of copper acetate in litre of soft water.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 200 sqm				
	Materials:-				
12013	Copper acetate	Kg	0.350	₹ 320.00	₹ 112.00
12035	Soft water	Litre	0.80	₹ 3.00	₹ 2.40
	Labour:-				
0227	Painter	Day	4.80	₹ 340.00	₹ 1,632.00
0212	Coolie	Day	4.80	₹ 300.00	₹ 1,440.00
	Add cost of ladders, Rassi, brushes, sand paper, carriage of materials etc.	@	10.00%	₹ 3,186.40	₹ 318.64
	Add for water charges	@	1.00%	₹ 3,505.04	₹ 35.05
	Add for sundries and contingencies	@	3.00%	₹ 3,505.04	₹ 105.15
	Add for contractor's profit and overheads	@	15.00%	₹ 3,610.19	₹ 541.53
	Cost of 200 sqm.				₹ 4,186.77
	Cost of 1 Sqm.				₹ 20.93
	Say				₹ 20.90

12.38.2	With a solution made of 13 gms of hydrochloric acid in a solution of 13 gms each of copper chloride, copper nitrate, ammonium chloride dissolved in litre of soft water.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 200 sqm				
	Materials:-				
12024	Hydrochloric acid	Kg	0.104	₹ 45.00	₹ 4.68
12014	Copper chloride	Kg	0.104	₹ 310.00	₹ 32.24
12015	Copper nitrate	Kg	0.104	₹ 235.00	₹ 24.44
12007	Ammonium chloride	Kg	0.104	₹ 25.00	₹ 2.60
12035	Soft water	Litre	0.80	₹ 3.00	₹ 2.40
	Labour:-				
0227	Painter	Day	4.80	₹ 340.00	₹ 1,632.00
0212	Coolie	Day	4.80	₹ 300.00	₹ 1,440.00
	Add cost of ladders, Rassi, brushes, sand paper, carriage of materials etc.	@	10.00%	₹ 3,074.40	₹ 307.44
	Add for water charges	@	1.00%	₹ 3,381.84	₹ 33.82
	Add for sundries and contingencies	@	3.00%	₹ 3,381.84	₹ 101.46

	Add for contractor's profit and overheads	@	15.00%	₹ 3,483.30	₹ 522.50
	Cost of 200 sqm.				₹ 4,039.62
	Cost of 1 Sqm.				₹ 20.20
	Say				₹ 20.20

12.39	Painting on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint (two or more coats) of approved brand and manufacture to give an even shade on new work over and including a priming coat of zinc chromate yellow primer complete.				
12.39.1	50mm. dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 30 Metre				
	Materials:-				
12001	Zinc chromate yellow primer	Litre	0.29	₹ 75.00	₹ 21.75
12008	Anticorrosive bituminous paint (black)	Litre	0.51	₹ 115.00	₹ 58.65
	Labour:-				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Coolie	Day	0.35	₹ 300.00	₹ 105.00
	Add cost of extra painting on fittings etc. including carriage of materials, wire brushes, putty, sand paper etc.	@	25.00%	₹ 313.40	₹ 78.35
	Add cost of scaffolding, ladder etc.	@	14.00%	₹ 391.75	₹ 54.85
	Add for water charges	@	1.00%	₹ 446.60	₹ 4.47
	Add for sundries and contingencies	@	3.00%	₹ 451.07	₹ 13.53
	Add for contractor's profit and overheads	@	15.00%	₹ 464.60	₹ 69.69
	Cost of 30 Metre				₹ 534.29
	Cost of 1 Metre				₹ 17.81
	Say				₹ 17.80

12.39.2	75mm. dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 30 Metre				
	Materials:-				
12001	Zinc chromate yellow primer	Litre	0.41	₹ 75.00	₹ 30.75
12008	Anticorrosive bituminous paint (black)	Litre	0.73	₹ 115.00	₹ 83.95
	Labour:-				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0227	Painter	Day	0.48	₹ 340.00	₹ 163.20
0212	Coolie	Day	0.48	₹ 300.00	₹ 144.00
	Add cost of extra painting on fittings etc. including carriage of materials, wire brushes, putty, sand paper etc.	@	25.00%	₹ 433.90	₹ 108.48
	Add cost of scaffolding, ladder etc.	@	10.00%	₹ 542.38	₹ 54.24
	Add for water charges	@	1.00%	₹ 596.62	₹ 5.97
	Add for sundries and contingencies	@	3.00%	₹ 602.59	₹ 18.08
	Add for contractor's profit and overheads	@	15.00%	₹ 620.67	₹ 93.10
	Cost of 30 Metre				₹ 713.77
	Cost of 1 Metre				₹ 23.79
	Say				₹ 23.80

12.39.3	100mm. dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 30 Metre				
	Materials:-				
12001	Zinc chromate yellow primer	Litre	0.54	₹ 75.00	₹ 40.50
12008	Anticorrosive bituminous paint (black)	Litre	0.95	₹ 115.00	₹ 109.25
	Labour:-				
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
0227	Painter	Day	0.65	₹ 340.00	₹ 221.00
0212	Coolie	Day	0.65	₹ 300.00	₹ 195.00

	Add cost of extra painting on fittings etc. including carriage of materials, wire brushes, putty, sand paper etc.	@	25.00%	₹ 580.75	₹ 145.19
	Add cost of scaffolding, ladder etc.	@	8.00%	₹ 725.94	₹ 58.08
	Add for water charges	@	1.00%	₹ 784.02	₹ 7.84
	Add for sundries and contingencies	@	3.00%	₹ 791.86	₹ 23.76
	Add for contractor's profit and overheads	@	15.00%	₹ 815.62	₹ 122.34
	Cost of 30 Metre				₹ 937.96
	Cost of 1 Metre				₹ 31.27
	Say				₹ 31.30

12.39.4	150mm. dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 30 Metre				
	Materials:-				
12001	Zinc chromate yellow primer	Litre	0.80	₹ 75.00	₹ 60.00
12008	Anticorrosive bituminous paint (black)	Litre	1.41	₹ 115.00	₹ 162.15
	Labour:-				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0227	Painter	Day	1.00	₹ 340.00	₹ 340.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
	Add cost of extra painting on fittings etc. including carriage of materials, wire brushes, putty, sand paper etc.	@	24.00%	₹ 886.15	₹ 212.68
	Add cost of scaffolding, ladder etc.	@	6.00%	₹ 1,098.83	₹ 65.93
	Add for water charges	@	1.00%	₹ 1,164.76	₹ 11.65
	Add for sundries and contingencies	@	3.00%	₹ 1,176.41	₹ 35.29
	Add for contractor's profit and overheads	@	15.00%	₹ 1,211.70	₹ 181.76
	Cost of 30 Metre				₹ 1,393.46
	Cost of 1 Metre				₹ 46.45
	Say				₹ 46.50

12.40	Painting on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint (two or more coats) of required colour of approved brand and manufacture to give an even shade on new work over and including a priming coat of approved steel primer complete.				
12.40.1	50mm. dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 30 Metre				
	Materials:-				
12001	Zinc chromate yellow primer	Litre	0.29	₹ 75.00	₹ 21.75
12041	Synthetic enamel paint	Litre	0.43	₹ 185.00	₹ 79.55
	Labour:-				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Coolie	Day	0.35	₹ 300.00	₹ 105.00
	Add cost of extra painting on fittings etc. including carriage of materials, wire brushes, putty, sand paper etc.	@	25.00%	₹ 334.30	₹ 83.58
	Add cost of scaffolding, ladder etc.	@	14.00%	₹ 417.88	₹ 58.50
	Add for water charges	@	1.00%	₹ 476.38	₹ 4.76
	Add for sundries and contingencies	@	3.00%	₹ 481.14	₹ 14.43
	Add for contractor's profit and overheads	@	15.00%	₹ 495.57	₹ 74.34
	Cost of 30 Metre				₹ 569.91
	Cost of 1 Metre				₹ 19.00
	Say				₹ 19.00

12.40.2	75mm. dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 30 Metre				
	Materials:-				
12001	Zinc chromate yellow primer	Litre	0.41	₹ 75.00	₹ 30.75

12041	Synthetic enamel paint	Litre	0.61	₹ 185.00	₹ 112.85
	Labour:-				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0227	Painter	Day	0.48	₹ 340.00	₹ 163.20
0212	Coolie	Day	0.48	₹ 300.00	₹ 144.00
	Add cost of extra painting on fittings etc. including carriage of materials, wire brushes, putty, sand paper etc.	@	25.00%	₹ 462.80	₹ 115.70
	Add cost of scaffolding, ladder etc.	@	10.00%	₹ 578.50	₹ 57.85
	Add for water charges	@	1.00%	₹ 636.35	₹ 6.36
	Add for sundries and contingencies	@	3.00%	₹ 642.71	₹ 19.28
	Add for contractor's profit and overheads	@	15.00%	₹ 661.99	₹ 99.30
	Cost of 30 Metre				₹ 761.29
	Cost of 1 Metre				₹ 25.38
	Say				₹ 25.40

12.40.3 100mm. dia.					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 30 Metre				
	Materials:-				
12001	Zinc chromate yellow primer	Litre	0.54	₹ 75.00	₹ 40.50
12041	Synthetic enamel paint	Litre	0.80	₹ 185.00	₹ 148.00
	Labour:-				
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
0227	Painter	Day	0.65	₹ 340.00	₹ 221.00
0212	Coolie	Day	0.65	₹ 300.00	₹ 195.00
	Add cost of extra painting on fittings etc. including carriage of materials, wire brushes, putty, sand paper etc.	@	25.00%	₹ 619.50	₹ 154.88
	Add cost of scaffolding, ladder etc.	@	8.00%	₹ 774.38	₹ 61.95
	Add for water charges	@	1.00%	₹ 836.33	₹ 8.36
	Add for sundries and contingencies	@	3.00%	₹ 844.69	₹ 25.34
	Add for contractor's profit and overheads	@	15.00%	₹ 870.03	₹ 130.50
	Cost of 30 Metre				₹ 1,000.53
	Cost of 1 Metre				₹ 33.35
	Say				₹ 33.40

12.40.4 150mm. dia.					
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 30 Metre				
	Materials:-				
12001	Zinc chromate yellow primer	Litre	0.80	₹ 75.00	₹ 60.00
12041	Synthetic enamel paint	Litre	1.19	₹ 185.00	₹ 220.15
	Labour:-				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0227	Painter	Day	1.00	₹ 340.00	₹ 340.00
0212	Coolie	Day	1.00	₹ 300.00	₹ 300.00
	Add cost of extra painting on fittings etc. including carriage of materials, wire brushes, putty, sand paper etc.	@	24.00%	₹ 944.15	₹ 226.60
	Add cost of scaffolding, ladder etc.	@	6.00%	₹ 1,170.75	₹ 70.25
	Add for water charges	@	1.00%	₹ 1,241.00	₹ 12.41
	Add for sundries and contingencies	@	3.00%	₹ 1,253.41	₹ 37.60
	Add for contractor's profit and overheads	@	15.00%	₹ 1,291.01	₹ 193.65
	Cost of 30 Metre				₹ 1,484.66
	Cost of 1 Metre				₹ 49.49
	Say				₹ 49.50

12.41	Painting on wood work with oil type wood preservative (two or more coats) of approved brand and manufacture on new work complete.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12028	Oil type wood preservative	Litre	1.00	₹ 155.00	₹ 155.00
	Labour:-				
0227	Painter	Day	0.15	₹ 340.00	₹ 51.00
0212	Coolie	Day	0.15	₹ 300.00	₹ 45.00
	Add cost for carriage of materials, brushes, sand paper, ladder etc.	@	10.00%	₹ 251.00	₹ 25.10
	Add for water charges	@	1.00%	₹ 276.10	₹ 2.76
	Add for sundries and contingencies	@	3.00%	₹ 278.86	₹ 8.37
	Add for contractor's profit and overheads	@	15.00%	₹ 287.23	₹ 43.08
	Cost of 10 sqm.				₹ 330.31
	Cost of 1 Sqm.				₹ 33.03
	Say				₹ 33.00

12.42	Providing and applying two coats of fire retardant paint unthinned on cleaned wood/ply surface of required colour of approved brand and manufacture on new work @ 3.5 sqm per litre including preparation of base surface as per recommendation of the manufacturer to make the surface fire retardant.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12021	Fire retardant paint	Litre	5.70	₹ 290.00	₹ 1,653.00
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0203	Beldar	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materials, Putty for filling, brushes, sand paper etc. including carriage of water proofing cement paint.	@	2.00%	₹ 1,998.60	₹ 39.97
	Add cost of scaffolding, ladder etc.	@	1.00%	₹ 2,038.57	₹ 20.39
	Add for water charges	@	1.00%	₹ 2,058.96	₹ 20.59
	Add for sundries and contingencies	@	3.00%	₹ 2,079.55	₹ 62.39
	Add for contractor's profit and overheads	@	15.00%	₹ 2,141.94	₹ 321.29
	Cost of 10 sqm.				₹ 2,463.23
	Cost of 1 Sqm.				₹ 246.32
	Say				₹ 246.30

12.43	Coal tarring (two or more coats) of approved brand and manufacture on new work @ 0.16 litre and 0.12 coal tar per sqm in the first coat and second coat respectively complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12011	Coal Tar	Litre	2.80	₹ 35.00	₹ 98.00
02004	Kerosene oil	Litre	0.50	₹ 48.00	₹ 24.00
	Labour:-				
0203	Beldar	Day	0.43	₹ 300.00	₹ 129.00
	Add cost of lime, carriage of materials, brushes, fire-wood etc. including carriage of coal tar and kerosene oil.	@	15.00%	₹ 251.00	₹ 37.65
	Add for water charges	@	1.00%	₹ 288.65	₹ 2.89
	Add for sundries and contingencies	@	3.00%	₹ 291.54	₹ 8.75
	Add for contractor's profit and overheads	@	15.00%	₹ 300.29	₹ 45.04
	Cost of 10 sqm.				₹ 345.33
	Cost of 1 Sqm.				₹ 34.53
	Say				₹ 34.50

12.44	Wall painting with acrylic emulsion paint (two or more coats) of required colour of approved brand and manufacture on new work to give an even shade. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12032	Plastic emulsion paint	Litre	1.21	₹ 220.00	₹ 266.20
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materilas, brushes, sand paper, putty etc. including carriage of paint.	@	6.00%	₹ 611.80	₹ 36.71
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 648.51	₹ 25.94
	Add for water charges	@	1.00%	₹ 674.45	₹ 6.74
	Add for sundries and contingencies	@	3.00%	₹ 681.19	₹ 20.44
	Add for contractor's profit and overheads	@	15.00%	₹ 701.63	₹ 105.24
	Cost of 10 sqm.				₹ 806.87
	Cost of 1 Sqm.				₹ 80.69
	Say				₹ 80.70

12.45	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.45.1	One coat				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12057	Acrylic emulsion, having VOC content less than 50 grams/ litre	Litre	0.53	₹ 198.00	₹ 104.94
	Labour:-				
0227	Painter	Day	0.36	₹ 340.00	₹ 122.40
0212	Coolie	Day	0.36	₹ 300.00	₹ 108.00
	Add cost of carriage of materilas, brushes, sand paper, putty etc. including carriage of paint.	@	10.00%	₹ 335.34	₹ 33.53
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 368.87	₹ 14.75
	Add for water charges	@	1.00%	₹ 383.62	₹ 3.84
	Add for sundries and contingencies	@	3.00%	₹ 387.46	₹ 11.62
	Add for contractor's profit and overheads	@	15.00%	₹ 399.08	₹ 59.86
	Cost of 10 sqm.				₹ 458.94
	Cost of 1 Sqm.				₹ 45.89
	Say				₹ 45.90

12.45.2	Two coats				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12057	Acrylic emulsion, having VOC content less than 50 grams/ litre	Litre	0.84	₹ 198.00	₹ 166.32
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materilas, brushes, sand paper, putty etc. including carriage of paint.	@	10.00%	₹ 511.92	₹ 51.19
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 563.11	₹ 22.52
	Add for water charges	@	1.00%	₹ 585.63	₹ 5.86
	Add for sundries and contingencies	@	3.00%	₹ 591.49	₹ 17.74
	Add for contractor's profit and overheads	@	15.00%	₹ 609.23	₹ 91.38
	Cost of 10 sqm.				₹ 700.61
	Cost of 1 Sqm.				₹ 70.06
	Say				₹ 70.10

12.46	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.46.1	One coat				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12058	Premium acrylic emulsion paint of interior grade, having VOC content less than 50 grams/ litre	Litre	0.38	₹ 225.00	₹ 85.50
	Labour:-				
0227	Painter	Day	0.36	₹ 340.00	₹ 122.40
0212	Coolie	Day	0.36	₹ 300.00	₹ 108.00
	Add cost of carriage of materilas, brushes, sand paper, putty etc. including carriage of paint.	@	20.00%	₹ 315.90	₹ 63.18
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 379.08	₹ 15.16
	Add for water charges	@	1.00%	₹ 394.24	₹ 3.94
	Add for sundries and contingencies	@	3.00%	₹ 398.18	₹ 11.95
	Add for contractor's profit and overheads	@	15.00%	₹ 410.13	₹ 61.52
	Cost of 10 sqm.				₹ 471.65
	Cost of 1 Sqm.				₹ 47.17
	Say				₹ 47.20

12.46.2	Two coats				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12058	Premium acrylic emulsion paint of interior grade, having VOC content less than 50 grams/ litre	Litre	0.60	₹ 225.00	₹ 135.00
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materilas, brushes, sand paper, putty etc. including carriage of paint.	@	25.00%	₹ 480.60	₹ 120.15
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 600.75	₹ 24.03
	Add for water charges	@	1.00%	₹ 624.78	₹ 6.25
	Add for sundries and contingencies	@	3.00%	₹ 631.03	₹ 18.93
	Add for contractor's profit and overheads	@	15.00%	₹ 649.96	₹ 97.49
	Cost of 10 sqm.				₹ 747.45
	Cost of 1 Sqm.				₹ 74.75
	Say				₹ 74.80

12.47	Painting with synthetic enamel paint (two or more coats) of required colour of approved brand and manufacture on new work to give an even shade. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12041	Synthetic enamel paint	Litre	1.16	₹ 185.00	₹ 214.60
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materilas, brushes, sand paper, putty etc.	@	6.00%	₹ 560.20	₹ 33.61
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 593.81	₹ 23.75
	Add for water charges	@	1.00%	₹ 617.56	₹ 6.18

	Add for sundries and contingencies	@	3.00%	₹ 623.74	₹ 18.71
	Add for contractor's profit and overheads	@	15.00%	₹ 642.45	₹ 96.37

	Cost of 10 sqm.				₹ 738.82
	Cost of 1 Sqm.				₹ 73.88
	Say				₹ 73.90

12.48	Painting with synthetic enamel paint (two or more coats) of required colour of approved brand and manufacture on new work to give an even shade over an under coat of suitable shade with ordinary paint of approved brand and manufacture. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12030	Pink or grey primer (for wood)	Litre	0.75	₹ 94.00	₹ 70.50
12041	Synthetic enamel paint	Litre	1.16	₹ 185.00	₹ 214.60
	Labour:-				
0227	Painter	Day	0.79	₹ 340.00	₹ 268.60
0212	Coolie	Day	0.79	₹ 300.00	₹ 237.00
	Add cost of carriage of materilas, brushes, sand paper, putty etc.	@	10.00%	₹ 790.70	₹ 79.07
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 869.77	₹ 34.79
	Add for water charges	@	1.00%	₹ 904.56	₹ 9.05
	Add for sundries and contingencies	@	3.00%	₹ 913.61	₹ 27.41
	Add for contractor's profit and overheads	@	15.00%	₹ 941.02	₹ 141.15
	Cost of 10 sqm.				₹ 1,082.17
	Cost of 1 Sqm.				₹ 108.22
	Say				₹ 108.20

12.49	Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
12.49.1	One coat				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12059	Synthetic enamel paint, having VOC content less than 150 grams/ litre	Litre	0.53	₹ 214.00	₹ 113.42
	Labour:-				
0227	Painter	Day	0.36	₹ 340.00	₹ 122.40
0212	Coolie	Day	0.36	₹ 300.00	₹ 108.00
	Add cost of carriage of materilas, brushes, sand paper, putty etc. including carriage of paint.	@	6.00%	₹ 343.82	₹ 20.63
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 364.45	₹ 14.58
	Add for water charges	@	1.00%	₹ 379.03	₹ 3.79
	Add for sundries and contingencies	@	3.00%	₹ 382.82	₹ 11.48
	Add for contractor's profit and overheads	@	15.00%	₹ 394.30	₹ 59.15
	Cost of 10 sqm.				₹ 453.45
	Cost of 1 Sqm.				₹ 45.35
	Say				₹ 45.40

12.49.2	Two coats				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12059	Synthetic enamel paint, having VOC content less than 150 grams/ litre	Litre	0.84	₹ 214.00	₹ 179.76
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00

	Add cost of carriage of materilas, brushes, sand paper, putty etc. including carriage of paint.	@	10.00%	₹ 525.36	₹ 52.54
	Add cost of scaffolding, ladder etc.	@	4.00%	₹ 577.90	₹ 23.12
	Add for water charges	@	1.00%	₹ 601.02	₹ 6.01
	Add for sundries and contingencies	@	3.00%	₹ 607.03	₹ 18.21
	Add for contractor's profit and overheads	@	15.00%	₹ 625.24	₹ 93.79
	Cost of 10 sqm.				₹ 719.03
	Cost of 1 Sqm.				₹ 71.90
	Say				₹ 71.90

12.50	Painting with Aluminium paint (two or more coats) of approved brand and manufacture on new work to give an even shade. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12005	Aluminium paint	Litre	0.80	₹ 142.00	₹ 113.60
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materilas, putty, brushes, sand paper, ladder etc.	@	12.00%	₹ 459.20	₹ 55.10
	Add for water charges	@	1.00%	₹ 514.30	₹ 5.14
	Add for sundries and contingencies	@	3.00%	₹ 519.44	₹ 15.58
	Add for contractor's profit and overheads	@	15.00%	₹ 535.02	₹ 80.25
	Cost of 10 sqm.				₹ 615.27
	Cost of 1 Sqm.				₹ 61.53
	Say				₹ 61.50

12.51	Painting with acid proof paint (two or more coats) of approved brand and manufacture of required colour on new work to give an even shade.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12003	Acid proof paint	Litre	1.16	₹ 230.00	₹ 266.80
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materilas, putty, brushes, sand paper, ladder etc.	@	12.00%	₹ 612.40	₹ 73.49
	Add for water charges	@	1.00%	₹ 685.89	₹ 6.86
	Add for sundries and contingencies	@	3.00%	₹ 692.75	₹ 20.78
	Add for contractor's profit and overheads	@	15.00%	₹ 713.53	₹ 107.03
	Cost of 10 sqm.				₹ 820.56
	Cost of 1 Sqm.				₹ 82.06
	Say				₹ 82.10

12.52	Painting with black anticorrosive bitumastic paint (two or more coats) of approved brand and manufacture on new work to give an even shade.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12008	Black anticorrosive bitumastic paint	Litre	0.95	₹ 115.00	₹ 109.25
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materilas, brushes, sand paper, ladders, chalis etc.	@	12.00%	₹ 454.85	₹ 54.58
	Add for water charges	@	1.00%	₹ 509.43	₹ 5.09
	Add for sundries and contingencies	@	3.00%	₹ 514.52	₹ 15.44

	Add for contractor's profit and overheads	@	15.00%	₹ 529.96	₹ 79.49
	Cost of 10 sqm.				₹ 609.45
	Cost of 1 Sqm.				₹ 60.95
	Say				₹ 61.00

12.53	Floor painting with floor enamel paint (two or more coats) of approved brand and manufacture of required colour on new work to give an even shade.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12022	Floor enamel paint in all shades	Litre	1.48	₹ 130.00	₹ 192.40
	Labour:-				
0227	Painter	Day	0.54	₹ 340.00	₹ 183.60
0212	Coolie	Day	0.54	₹ 300.00	₹ 162.00
	Add cost of carriage of materilas, putty, brushes, sand paper, turpentine, caustic soda or washing soda and joint alloys etc.	@	8.00%	₹ 538.00	₹ 43.04
	Add for water charges	@	1.00%	₹ 581.04	₹ 5.81
	Add for sundries and contingencies	@	3.00%	₹ 586.85	₹ 17.61
	Add for contractor's profit and overheads	@	15.00%	₹ 604.46	₹ 90.67
	Cost of 10 sqm.				₹ 695.13
	Cost of 1 Sqm.				₹ 69.51
	Say				₹ 69.50

12.54	Varnishing with varnish of approved brand and mamufacturer.				
12.54.1	Two or more coats of glue with copal varnish over an under coat of flatting varnish.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12029	Undercoat flatting varnish	Litre	0.70	₹ 110.00	₹ 77.00
12038	Copal varnish	Litre	1.16	₹ 145.00	₹ 168.20
12023	Glue for sizing	Kg	0.07	₹ 135.00	₹ 9.45
	Labour:-				
0227	Painter	Day	0.90	₹ 340.00	₹ 306.00
0212	Coolie	Day	0.90	₹ 300.00	₹ 270.00
	Add cost of carriage of materilas, brushes, sand paper, putty for repairs etc.	@	10.00%	₹ 830.65	₹ 83.07
	Add cost of scaffolding, ladder etc.	@	0.50%	₹ 913.72	₹ 4.57
	Add for water charges	@	1.00%	₹ 918.29	₹ 9.18
	Add for sundries and contingencies	@	3.00%	₹ 927.47	₹ 27.82
	Add for contractor's profit and overheads	@	15.00%	₹ 955.29	₹ 143.29
	Cost of 10 sqm.				₹ 1,098.58
	Cost of 1 Sqm.				₹ 109.86
	Say				₹ 109.90

12.54.2	Two or more coats of glue with spar varnish over an under coat of flatting varnish.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12029	Undercoat flatting varnish	Litre	0.70	₹ 110.00	₹ 77.00
12039	Superior spar varnish	Litre	1.260	₹ 145.00	₹ 182.70
12023	Glue for sizing	Kg	0.07	₹ 135.00	₹ 9.45
	Labour:-				
0227	Painter	Day	0.90	₹ 340.00	₹ 306.00
0212	Coolie	Day	0.90	₹ 300.00	₹ 270.00
	Add cost of carriage of materilas, brushes, sand paper, putty for repairs etc.	@	10.00%	₹ 845.15	₹ 84.52
	Add cost of scaffolding, ladder etc.	@	0.50%	₹ 929.67	₹ 4.65

	Add for water charges	@	1.00%	₹ 934.32	₹ 9.34
	Add for sundries and contingencies	@	3.00%	₹ 943.66	₹ 28.31
	Add for contractor's profit and overheads	@	15.00%	₹ 971.97	₹ 145.80
	Cost of 10 sqm.				₹ 1,117.77
	Cost of 1 Sqm.				₹ 111.78
	Say				₹ 111.80

12.55	French spirit polishing (two or more coats of glue sizing) on new work over a coat of wood filler.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12047	Shellac	Kg	0.240	₹ 330.00	₹ 79.20
12036	Spirit	Litre	1.63	₹ 72.00	₹ 117.36
	Labour:-				
0227	Painter	Day	3.50	₹ 340.00	₹ 1,190.00
	Add cost of pigment, carriage of materials, turpentine oil, sand paper, putty, wood filler, white woollen cloth, linseed oil, cotton etc.	@	15.00%	₹ 1,386.56	₹ 207.98
	Add cost of scaffolding, ladder etc.	@	0.50%	₹ 1,594.54	₹ 7.97
	Add for water charges	@	1.00%	₹ 1,602.51	₹ 16.03
	Add for sundries and contingencies	@	3.00%	₹ 1,618.54	₹ 48.56
	Add for contractor's profit and overheads	@	15.00%	₹ 1,667.10	₹ 250.07
	Cost of 10 sqm.				₹ 1,917.17
	Cost of 1 Sqm.				₹ 191.72
	Say				₹ 191.70

12.56	Polishing on wood work with readymade wax polish (two or more coats) of approved brand and manufacture on new work.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12044	Ready made Wax polish	Kg	0.50	₹ 265.00	₹ 132.50
	Labour:-				
0227	Painter	Day	0.80	₹ 340.00	₹ 272.00
0212	Coolie	Day	0.80	₹ 300.00	₹ 240.00
	Add cost for carriage of materials, soap, brushes, cloth etc.	@	7.50%	₹ 644.50	₹ 48.34
	Add cost of scaffolding, ladder etc.	@	0.50%	₹ 692.84	₹ 3.46
	Add for water charges	@	1.00%	₹ 696.30	₹ 6.96
	Add for sundries and contingencies	@	3.00%	₹ 703.26	₹ 21.10
	Add for contractor's profit and overheads	@	15.00%	₹ 724.36	₹ 108.65
	Cost of 10 sqm.				₹ 833.01
	Cost of 1 Sqm.				₹ 83.30
	Say				₹ 83.30

12.57	Floor polishing on masonry / concrete floors with readymade wax polish (two or more coats) of approved brand and manufacture on new work.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 sqm				
	Materials:-				
12044	Ready made Wax polish	Kg	0.10	₹ 265.00	₹ 26.50
	Labour:-				
0227	Painter	Day	0.40	₹ 340.00	₹ 136.00
0212	Coolie	Day	0.40	₹ 300.00	₹ 120.00
	Add cost for carriage of materials, cost of acetic acid, soap, cloth etc.	@	12.00%	₹ 282.50	₹ 33.90
	Add cost of scaffolding, ladder etc.	@	0.50%	₹ 316.40	₹ 1.58
	Add for water charges	@	1.00%	₹ 317.98	₹ 3.18

	Add for sundries and contingencies	@	3.00%	₹ 321.16	₹ 9.63
	Add for contractor's profit and overheads	@	15.00%	₹ 330.79	₹ 49.62
	Cost of 10 sqm.				₹ 380.41
	Cost of 1 Sqm.				₹ 38.04
	Say				₹ 38.00

12.58	Lettering with black japan paint of approved brand and manufacture on new work.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 100 letters 15 cm height				
	Materials:-				
12009	Black Japan Paint	Litre	0.56	₹ 110.00	₹ 61.60
	Labour:-				
0227	Painter	Day	6.00	₹ 340.00	₹ 2,040.00
0212	Coolie	Day	2.00	₹ 300.00	₹ 600.00
	Add cost for carriage of materials, cost of brushes, turpentine, stencils etc.	@	10.00%	₹ 2,701.60	₹ 270.16
	Add cost of scaffolding, ladder etc.	@	0.50%	₹ 2,971.76	₹ 14.86
	Add for water charges	@	1.00%	₹ 2,986.62	₹ 29.87
	Add for sundries and contingencies	@	3.00%	₹ 3,016.49	₹ 90.49
	Add for contractor's profit and overheads	@	15.00%	₹ 3,106.98	₹ 466.05
	Cost of 100 letters 15 cm height				₹ 3,573.03
	Cost per letter per cm height				₹ 2.38
	Say				₹ 2.40

12.59	Providing and applying 12 mm thick (average) premixed formulated one coat gypsum lightweight plaster having additives and light weight aggregates as vermiculite/ perlite respectively conforming to IS: 2547 (Part - 1 & II) 1976, applied on hacked / uneven background such as bare brick/ block/ RCC work on walls & ceiling at all floors and locations, finished in smooth line and level etc. complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm				
	Materials:-				
12060	Premixed super white gypsum plaster @ 16.14kg /sqm = 61.40 + 5% wastage = 161.40+8.07= 169.47 kg Premixed super white gypsum plaster.	kg	169.47	₹ 6.00	₹ 1,016.82
	Labour:-				
0218*	Mason (ave.)	Day	1.20	₹ 400.00	₹ 480.00
0212	Coolie	Day	1.20	₹ 300.00	₹ 360.00
	Add cost for carriage of materials, cost of brushes etc.	@	0.50%	₹ 1,856.82	₹ 9.28
	Add cost of scaffolding, ladder etc.	@	0.50%	₹ 1,866.10	₹ 9.33
	Add for water charges	@	1.00%	₹ 1,875.43	₹ 18.75
	Add for sundries and contingencies	@	3.00%	₹ 1,894.18	₹ 56.83
	Add for contractor's profit and overheads	@	15.00%	₹ 1,951.01	₹ 292.65
	Cost of 10 sqm				₹ 2,243.66
	Cost of 1 sqm				₹ 224.37
	Say				₹ 224.40

12.60	Extra for addition of synthetic Polyester triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement plaster/mortar by using 125 gms. of synthetic Per Bag of Polyester triangular fibre for 50 Kgs. cement used in cement mortar as per directions of Engineer-in-Charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for per bag of 50 kg of cement used in mortar				
	Materials:-				
12061	Synthetic polyester triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40	kg	0.125	₹ 405.00	₹ 50.63

	Labour:-				
0212	Coolie	Day	0.01	₹ 300.00	₹ 1.50
	Add for water charges	@	1.00%	₹ 52.13	₹ 0.52
	Add for contractor's profit and overheads	@	15.00%	₹ 52.65	₹ 7.90
	Cost per bag of 50 kg of cement				₹ 60.55
	Say				₹ 60.60

S U B - H E A D - 1 3



R E P A I R S T O B U I L D I N G

SUB HEAD : 13.0 / REPAIRS TO BUILDING

BASIC RATES

Code No.	Description	Unit	Rate
0210	Carpenter 2nd class	Day	₹ 380.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0217	Glazier	Day	₹ 380.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0224	Mate	Day	₹ 300.00
0227	Painter	Day	₹ 340.00
0232	White Washer	Day	₹ 340.00
0205	Waterman	Day	₹ 300.00
0212	Helper	Day	₹ 300.00
0234	Sewerman	Day	₹ 340.00
0233	Technician	Day	₹ 700.00
0228	Skilled Beldar	Day	₹ 380.00
0230	Sprayer (for bitumen, tar etc.)	Day	₹ 340.00
0207	Backsmith 2nd class	Day	₹ 380.00
0117	Hire charge of pump set of capacity 4000 litres/hour	Day	₹ 657.00
0134	Hire Charges of Suction Jeting machine 2200 PSI machine including POL and operator	Day	₹ 37,000.00
0135	Hire charges of Spraying machine including electric charges	Day	₹ 285.00
0136	Air compressor	hour	₹ 230.00
0137	Using cost of Ultra Violet Radiation tube	hour	₹ 230.00
12011	Coal Tar	Litre	₹ 35.00
03001	Cement (portland)	tonne	₹ 6,100.00
11016	Fuel wood	quintal	₹ 400.00
12023	Glue	Kg	₹ 135.00
05033	Hessian cloth	sqm	₹ 28.00
02004	Kerosene oil	litre	₹ 48.00
12017	Dehradun white lime	Kg	₹ 7.50
12018	Dry distemper	Kg	₹ 35.00
12027	Oil bound washable distemper/ Acrylic distemper	Kg	₹ 52.00
12026	Linseed oil (double boiled)	Litre	₹ 210.00
12005	Aluminium paint	Litre	₹ 142.00
12003	Acid proof paint (chocolate or black)	Litre	₹ 230.00
12008	Anticorrosive bituminous paint (black)	Litre	₹ 115.00
12009	Black Japan	Litre	₹ 110.00

Code No.	Description	Unit	Rate
12041	Synthetic enamel paint in black or chocolate shade	Litre	₹ 185.00
12032	Plastic emulsion paint	Litre	₹ 220.00
12045	White lead	Kg	₹ 155.00
12043	Water proofing cement paint	Kg	₹ 44.00
12044	Wax polish (ready made)	Kg	₹ 265.00
12038	Superior copal varnish	Litre	₹ 145.00
12039	Superior spar varnish	Litre	₹ 145.00
12028	Oil type wood preservative	Litre	₹ 155.00
05039	Steel (mild) round bar above 12 mm dia	quintal	₹ 4,010.00
05056	Structural steel such as tees, angles channels and R.S. joists	quintal	₹ 4,267.00
11020	Galvanised steel J or L hooks 8 mm dia	10 Nos	₹ 125.00
11017	G.I. Limpet washer	100 Nos	₹ 37.00
11006	Bitumen washer	100 Nos	₹ 32.00
12046	Whiting	Kg	₹ 6.50
12020	Epoxy paint	Litre	₹ 250.00
12021	Fire retardant paint	Litre	₹ 290.00
13003	Putty for wood work	Kg.	₹ 35.00
08146	Glass panes of 4 mm thick (10.00 kg / sqm).	sqm	₹ 360.00
08147	Glass panes of 5.5 mm thick (13.50 kg/sqm).	Sqm.	₹ 535.00
13005	Local teak wood fillets.	Cum.	₹ 31,465.00
13006	Gamir wood fillets.	Cum.	₹ 34,326.00
13007	Soft wood fillets.	Cum.	₹ 12,960.00
13008	Sal wood batten	Cum.	₹ 29,160.00
13009	Karai wood batten	Cum.	₹ 22,680.00
13010	Soft wood batten	Cum.	₹ 12,960.00
08288	Sal wood beam	Cum.	₹ 45,000.00
08289	Karai wood beam	Cum.	₹ 38,000.00
05017	Bolts and nuts up to 300 mm in length	quintal	₹ 6,749.00
12025	Indigo	Kg	₹ 65.00
12012	Colouring material	Kg	₹ 75.00
12002	1st quality Acrylic washable distemper	Kg	₹ 45.00
12042	Textured exterior paint	Litre	₹ 245.00
12004	Acrylic exterior paint	Litre	₹ 185.00
12033	Premium Acrylic smooth exterior paint	Litre	₹ 218.00
02004	Kerosene oil	litre	₹ 20.00
12022	Floor enamel paint in all shades except green	Litre	₹ 130.00
12023	Glue	Kg	₹ 135.00
12047	Wood filler (Shellac)	Kg	₹ 330.00
12036	Spirit	Litre	₹ 72.00

Code No.	Description	Unit	Rate
13011	Base Jack	each	₹ 168.00
09013	Mild steel tubes hot finished welded type	kg	₹ 56.00
13012	Spigot for standard jointing	kg	₹ 51.00
05023	Double coupler	each	₹ 73.00
13013	Challies	each	₹ 896.00
13014	Cup lock	each	₹ 58.00
19001	Bleaching powder	quantal	₹ 2,400.00
13015	Water for jetting / blowback	1000 litre	₹ 1,000.00
18080	Vitreous china Indian type W.C. pan size 580 mm	each	₹ 420.00
18081	Vitreous china orrisa type W.C. pan size 580 mm	each	₹ 750.00
18084	Vitreous china foot rests 250x125x25 mm	pair	₹ 95.00
18183	Centrifugally sand cast (spun) S&S "P" or "S" trap	each	₹ 420.00
13016	PVC slotted pipe 200 mm dia as per IS: 12818	metre	₹ 785.00
08066	Bright finished or black enameled mild steel screws 40 mm	100 Nos.	₹ 60.00
11012	Dash fastener / Chemical fastener	each	₹ 14.00
13017	Wheel 75 mm dia. 40 mm wide	each	₹ 80.00
05026	Flats upto 10 mm in thickness	quintal	₹ 3,992.00
09022	Welding by electrc plant incuding wages for welder	cm	₹ 2.00
0473	Carriage: Timber/ wooden fillets	Cum	₹ 80.65
0468	Carriage: Steel	Tonne	₹ 110.94
0430	Carriage: Lime	Cum	₹ 130.51
0421	Carriage: Cement	Tonne	₹ 110.94
0472	Carriage: Tar bitumen	Tonne	₹ 110.94
0446	Carriage: Rubbish	Cum	₹ 130.51

SUB HEAD : 13.0

REPAIRS TO BUILDING

- 1 Sand can be either coarse or fine as required/available. Here, provision of fine sand is considered only due to non-availability of coarse sand in Tripura. However, design of concrete dictates for use of coarse sand, then separate analysis may be made as per site condition.
- 2 The rates are inclusive of form work i.e. inclusive of all necessary centring / staging, shuttering, scaffolding etc., removal of form work and with all such arrangements as specified in CPWD's specification.
- 3 Manual mixing of cement mortars have been considered here. However, for using of mechanical mixer, the cost will differ with manual mixing as per item no.3.17.
- 4 Description of items has been given very briefly. Relevant clauses of CPWD's specifications may be referred for detailed specification.
- 5 Rates of all materials used in the analysis are at the site of work which is including the cost for loading, unloading and haulage.
- 6 Green work shall be protected from the effects of sun and rain by suitable covering and also from damage, mortar dropping etc.during the execution of the work. Masonry work in cement or composite mortar shall be kept constantly moist on all faces for a minimum period of seven days.

EARTH WORK

13.1 Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like.

Code	Description	Unit	Quantity	Rate	Amount
	Details for 10.91 kilolitre Pumping hours 3 hrs. or 0.375 days	kilo litre			
0117	Hire charges of Pumpset of capacity 4000 litres/hour	day	0.375	₹ 657.00	₹ 246.38
	a. Labours:				
0203	Belder for clearing slush	Day	2.00	₹ 300.00	₹ 600.00
	b. Water charges: @ 1% on total.	1%	on	₹ 846.38	₹ 8.46
	c. Sundries & contingencies: @ 3% on total.	3%	on	₹ 854.84	₹ 25.65
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 880.49	₹ 132.07
				Total	₹ 1,012.56
			Total cost for 1 kilo litre		₹ 92.81
				Say,	₹ 92.80

SCAFFOLDING WORK

- 13.2 Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineerin-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.

Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for area 22.5m x 9.0m = 202.5 sqm	sqm			
	A. Materials : Scaffolding				
	Assuming shuttering material will become unserviceable after use of 40 times				
13011	Base jack 7x2=14 nos	each	14	₹ 168.00	₹ 2,352.00

09013	Mild steel tubes hot finished welded type 40mm dia M.S. Tube Vertical standard 2.5m length = 7x2x9x2.5 = 315.00 m Bracing ladder 1.5m length = 7x2x9x4.0873 = 513.00 m Side support 6.00m length = 3x2x6.00 = 36.00 m Horizontal support 3.00m length = 18x3x3.00 = 162.00 m Total = 1026.00m @ 3.67 kg/m = 3765.42 kg	kg	3765.42	₹ 56.00	₹ 210,863.52
13012	Spigot for standard jointing 7x2x9 = 126 nos x 0.40m length = 50.40m 50.40m @ 2.46kg/m = 123.98kg	kg	123.98	₹ 51.00	₹ 6,322.98
05017	Bolts and nuts upto 300 mm in length 2x7x2x9 = 252 nos @ 0.15 kg each = 37.80 kg = 0.378 q	qtl.	0.378	₹ 6,749.00	₹ 2,551.12
05023	Double coupler 2x3x2 + 2x18x3 = 120 nos	each	120	₹ 73.00	₹ 8,760.00
13013	Challies 3 nos x 18 lines = 54 nos Two level plate challies = 2x 18 lines = 36 nos, Total = 90 nos	each	90	₹ 896.00	₹ 80,640.00
13014	Cup lock Vertical standards 5x7x2x9 = 630.00 Nos. 2x18x19 = 684 Nos. Total =1314 Nos.	each	1314	₹ 58.00	₹ 76,212.00
TOTAL (A)					₹ 387,701.62
Add 10% for maintenance on A					(B) ₹ 38,770.16
Less 25% salvage value on A					(C) ₹ -96,925.41
TOTAL (A+B+C)					₹ 329,546.37
Considering that scaffolding shall be unserviceable after using 40 times, cost of using once					each (S) ₹ 8,238.66
Cost of scaffolding					each 1 ₹ 8,238.66 ₹ 8,238.66
B. Carriage					
0468	Carriage of Steel 40mm dia MS pipe = 3765.42 kg 25mm spigot = 123.98 kg Nuts & bolts = 37.80 kg Clamp = 120 nos @ 1.00kg each = 120.00 kg Challies = 90 nos @ 15.00kg each = 1350.00 kg Cup locks = 1314 nos @ 0.50kg each = 657.00 kg Total = 6054.20 kg = 6.054 tonne	tonne	6.054	₹ 110.94	₹ 671.63
c. Labours:					
0215	Fitter (grade 1)	Day	20.00	₹ 380.00	₹ 7,600.00
0203	Beldar	Day	40.00	₹ 300.00	₹ 12,000.00
b. Water charges & electricity: @ 1.5% on total.					1.5% on ₹ 28,510.29 ₹ 427.65
c. Sundries & contingencies: @ 30% on total.					30% on ₹ 28,937.94 ₹ 8,681.38
d. Contractor's profit & overheads: @ 15% on total.					15% on ₹ 37,619.32 ₹ 5,642.90
Total					₹ 34,351.93
Total cost for 1 sqm					₹ 169.64
Say,					₹ 169.60

ROUTINE MAINTENANCE WORK

- 13.3 Cleaning of terrace/loft water storage tank (inside surface area) upto 2000 litre capacity at all heights with coconut brushes, duster etc., removal of silt, rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5gm per litre capacity of tank, including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba, all complete as per direction of Engineer-in-Charge. (The old date already written on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs. 0.10 per litre if during cleaning any GI fittings or ball cock is damaged that is to be repaired by contractor at his own cost and nothing extra will be paid on this account).**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 tanks 1 tank is of 500 litres capacity i.e. 5000 litres	litre			
	MATERIAL				
19001	Bleaching powder	qtl.	0.025	₹ 2,400.00	₹ 60.00
0446	Carriage of Rubbish (asuming 0.040m depth of silt)	Day	0.25	₹ 130.51	₹ 32.63
	Marking with paint i/c removal of existing markings	LS			₹ 52.00
	a. Labours:				
0215	Assistant Fitter or 2nd class Fitter for opening ball cock wheel valve and other fittings	Day	1.00	₹ 380.00	₹ 380.00
0203	Beldar for cleaning disinfecting etc	Day	1.00	₹ 300.00	₹ 300.00
	b. Water charges: @ 1% on total.	1%	on	₹ 824.63	₹ 8.25
	c. Sundries & contingencies: @ 3% on total.	3%	on	₹ 832.88	₹ 24.99
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 857.87	₹ 128.68
				Total	₹ 986.55
	Total cost for 1 litre				₹ 0.20
				Say,	₹ 0.20

13.4 Cleaning and desilting of gully trap chamber, including removal of rubbish mixed with earth etc. and disposal of same, all as per the direction of Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Nos.	each			
	a. Labours:				
0234	Sewerman	Day	1.00	₹ 340.00	₹ 340.00
	b. Water charges: @ 1% on total.	1%	on	₹ 340.00	₹ 3.40
	c. Sundries & contingencies T & P Bamboo, bucket, wheel barrow etc.: @ 5% on total.	5%	on	₹ 343.40	₹ 17.17
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 360.57	₹ 54.09
				Total	₹ 414.66
	Total cost for each				₹ 41.47
				Say,	₹ 41.50

13.5 Cleaning of chocked sewer line by diesel running vehicle mounting hydraulic operated high pressure suction cum jetting sewer cleaning machine fitted with pump having 4000 litres suction capacity and 6000 litres water jetting tank capacity including skilled operator, supervising engineer etc. for cleaning and partial desilting of manholes and dechocking of sewer lines. Dechocking and flushing of sewer line from one manhole to another by high pressure jetting system of 2200 PSI for sewer line from 150mm dia upto 300mm dia for all depth.

Code	Description	Unit	Quantity	Rate	Amount
	Details of Cost for 208 metres	litre			
	MATERIAL				
13015	Water for jetting / blowback Machineries	1000 ltr.	0.025	₹ 1,000.00	₹ 0.03
0134	Hire Charges of Suction Jeting machine 2200 PSI machine including POL and operator	Day	1.00	₹ 37,000.00	₹ 37,000.00
	a. Labours:				
0233	Technician	Day	1.00	₹ 700.00	₹ 700.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	4.00	₹ 380.00	₹ 1,520.00
	b. Water charges: @ 1% on total.	1%	on	₹ 39,220.03	₹ 392.20
	c. Sundries & contingencies i/c Soap, brush, cloths : @ 3% on total.	3%	on	₹ 39,612.23	₹ 1,188.37
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 40,800.60	₹ 6,120.09
				Total	₹ 46,920.69

Total cost for 1 metre ₹ 225.58
Say, ₹ 225.60

13.6 Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:

(i) Tank shall be emptied of water by pumping & bottom shall be cleaned of slit and other deposits.

(ii) Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water.

(iii) Chlorination of RCC internal surface by liquid chlorine.

(iv) The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface.

(v) Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.

Code	Description	Unit	Quantity	Rate	Amount
	Let a underground tank of capacity 272000 litre or 272 KL and area of tank is 570sqm				
	(a) Dewater and slit cleaning Considering through pumping 20% of water to be lifted, water discharge =(272 x 20/ 100=54.40KL) Cost of pumping water with pump of capacity 4000 litres per hours , = (54.4/4 = 13.6 hours = @ 8 hours/ day = 1.7 day	sqm			
0117	Hire charges of Pump set of capacity 4000 litres/hour	Day	1.70	₹ 657.00	₹ 1,116.90
0203	Beldar	Day	10.88	₹ 300.00	₹ 3,264.00
	(b) Scrabing the internal surface of tank				
0203	Beldar	Day	5.13	₹ 300.00	₹ 1,539.00
0212	Coolie	Day	2.28	₹ 300.00	₹ 684.00
0205	Waterman	Day	2.28	₹ 300.00	₹ 684.00
	(c) Bleaching				
19001	Bleaching powder	qtl.	0.570	₹ 2,400.00	₹ 1,368.00
0135	Hire charges of Spraying machine including electric charges	Day	14.25	₹ 285.00	₹ 4,061.25
0230	Sprayer (for bitumen, tar etc.)	Day	14.25	₹ 340.00	₹ 4,845.00
	(d) Air jetting				
0136	Air compressor	hour	2.00	₹ 230.00	₹ 460.00
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	(e) Ultra Violet Radiation				
0137	Using cost of Ultra Violet Radiation tube	hour	0.50	₹ 230.00	₹ 115.00
0203	Beldar	Day	0.06	₹ 300.00	₹ 18.75
	e. Water charges: @ 1% on total.	1%	on	₹ 18,230.90	₹ 182.31
	f. Sundries & contingencies etc.: @ 5% on total.	5%	on	₹ 18,413.21	₹ 920.66
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 19,333.87	₹ 2,900.08
				Total	₹ 22,233.95
				Total cost for 1sqm	₹ 39.01
				Say,	₹ 39.00

13.7 Disconnecting damaged overhead/terrace PVC water storage tank of any size from water supply line and removing from the terrace including shifting at ground level as per direction of Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No	each			
	a. Labours:				
	For disconnecting & dismantling of existing W/s line of water storage tanks on terrace of Qtrs				

0215	Assistant Fitter or 2nd class Fitter	Day	0.10	₹ 380.00	₹	38.00
0203	Beldar	Day	0.10	₹ 300.00	₹	30.00
	For Bringing the tank at Ground Level					
0203	Beldar	Day	0.20	₹ 300.00	₹	60.00
	b. Water charges: @ 1% on total.	1%	on	₹ 128.00	₹	1.28
	c. Sundries & contingencies : @ 3% on total.	3%	on	₹ 129.28	₹	3.88
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 133.16	₹	19.97
				Total	₹	153.13
	Total cost for 1 no.				₹	153.13
				Say,	₹	153.10

13.8 Providing & fixing White vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material including malba, all complete as per the direction of Engineer-in charge.

13.8.1 Long pattern W.C Pan of size 580x440 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No	each			
	MATERIAL				
18080	Vitreous china Indian type W.C. pan size 580 mm	Each	1.00	₹ 420.00	₹ 420.00
18084	Vitreous china foot rests 250x125x25 mm	pair	1.00	₹ 95.00	₹ 95.00
18183	Centrifugally sand cast (spun) S&S "P" or "S" trap	Each	1.00	₹ 420.00	₹ 420.00
	a. Labours:				
	(a) For dismantling WC seat and P or S trap				
0234	Sewerman	Day	0.05	₹ 340.00	₹ 17.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	(b) For Fixing WC seat and "P" or "S" trap				
0203	Beldar	Day	0.80	₹ 300.00	₹ 240.00
0220	Mason 2nd class	Day	0.80	₹ 380.00	₹ 304.00
	b. Water charges: @ 1% on total.	1%	on	₹ 1,556.00	₹ 15.56
	c. Sundries & contingencies Cement sand & grit etc.: @ 3% on total.	3%	on	₹ 1,571.56	₹ 47.15
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,618.71	₹ 242.81
				Total	₹ 926.52
	Total cost for 1 no.				₹ 926.52
				Say,	₹ 926.50

13.8.2 Orissa pattern W.C Pan of size 580x440 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No	each			
	MATERIAL				
18080	Vitreous china orrisa type W.C. pan size 580 mm	Each	1.00	₹ 750.00	₹ 750.00
18183	Centrifugally sand cast (spun) S&S "P" or "S" trap	Each	1.00	₹ 420.00	₹ 420.00
0	a. Labours:				
0	(a) For dismantling WC seat and P or S trap				
0234	Sewerman	Day	0.05	₹ 340.00	₹ 17.00
0203	Beldar	Day	0.13	₹ 300.00	₹ 37.50
0	(b) For Fixing WC seat and "P" or "S" trap				
0203	Beldar	Day	0.80	₹ 300.00	₹ 240.00
0220	Mason 2nd class	Day	0.80	₹ 380.00	₹ 304.00
	b. Water charges: @ 1% on total.	1%	on	₹ 1,768.50	₹ 17.69
	c. Sundries & contingencies Cement sand & grit etc.: @ 3% on total.	3%	on	₹ 1,786.19	₹ 53.59

d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,839.78	₹	275.97
			Total	₹	945.75
		Total cost for 1 no.		₹	945.75
			Say,	₹	945.80

13.9 Dismantling W.C. Pan of all sizes including disposal of dismantled materials including malba all complete as per directions of Engineer-in-Charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No	each			
	a. Labours:				
0203	Beldar	Day	0.125	₹ 300.00	₹ 37.50
	b. Water charges: @ 1% on total.	1%	on	₹ 37.50	₹ 0.38
	c. Sundries & contingencies : @ 3% on total.	3%	on	₹ 37.88	₹ 1.14
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 39.02	₹ 5.85
				Total	₹ 44.87
		Total cost for 1 no.			₹ 44.87
			Say,	₹	44.90

13.10 Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge.

13.10.1 Internal Work- Exposed on wall

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre	metre			
	a. Labours:				
0203	Beldar	Day	0.050	₹ 300.00	₹ 15.00
	b. Water charges: @ 1% on total.	1%	on	₹ 15.00	₹ 0.15
	c. Sundries & contingencies : @ 3% on total.	3%	on	₹ 15.15	₹ 0.45
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 15.60	₹ 2.34
				Total	₹ 17.94
		Total cost for 1 m			₹ 1.79
			Say,	₹	1.80

13.11 Cutting holes of required size in brick masonry wall for fixing of exhaust fan including providing and fixing 300 mm dia PVC pipe conforming BIS-12818 and making good the same etc. complete as per direction of Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Detail of Cost for 10 holes Size 0.30x0.30x0.23 m wall	each			
	MATERIAL				
	12 mm plaster 1:4 (1 Cement: 4 Coarse sand)				
	Actual Area (10x4x0.3x0.23) = 0.296 + 0.24 L.S.	sqm	3.00	₹ 150.50	₹ 451.50
	For corners/sides = 3.00 Sqm				
	Rate as per Item No.12.1.2 of SH:FINISHING "A"				
13016	PVC slotted pipe 200 mm dia as per IS: 12818	m	0.25	₹ 785.00	₹ 196.25
	a. Labours:				
0203	Beldar	Day	1.20	₹ 300.00	₹ 360.00
0220	Mason 2nd class	Day	0.35	₹ 380.00	₹ 133.00
	b. Water charges: @ 1% on total. Except A	1%	on	₹ 689.25	₹ 6.89
	c. Sundries & contingencies Cement sand & grit etc.: @ 5% on total. Except A	5%	on	₹ 696.14	₹ 34.81
	d. Contractor's profit & overheads: @ 15% on total. Except A	15%	on	₹ 730.95	₹ 109.64

Total	₹	1,292.09
Total cost for 1 no.	₹	129.21
Say,	₹	129.20

WOOD WORK

- 13.12 Taking out existing wooden door shutter, repair by cutting, painting etc. and refixing of repaired door shutters to existing door frames, including replacement of hinges with screws, etc. as required, all complete as per the direction of the Engineer-in-charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one shutter (2.2 sqm) Normal exiting size of shutter 1.00x2.02m =2.02sqm	each			
	MATERIAL				
08066	Bright finished or black enameled mild steel screws 40 mm Assuming old hinges fixed in Tee iron frames Half qty = 48/2=24 needs replacement	100 Nos.	0.24	₹ 60.00	₹ 14.40
	a. Labours:				
0210	Carpenter 2nd class	Day	0.18	₹ 380.00	₹ 68.40
0203	Beldar	Day	0.18	₹ 300.00	₹ 54.00
	b. Water charges: @ 1% on total.	1%	on	₹ 136.80	₹ 1.37
	c. Sundries & contingencies : @ 3% on total.	3%	on	₹ 138.17	₹ 4.15
	d. Contractor's profit & overheads: @ 15% on total. Except A	15%	on	₹ 142.32	₹ 21.35
	Total			₹	163.67
	Total cost for 1 no.			₹	163.67
	Say,			₹	163.70

- 13.13 Fixing chowkhats in existing opening including embedding chowkhats in floors or walls, cutting masonry / RCC / CC for hold fasts, embedding hold fasts in cement concrete blocks with cement concrete 1 : 3 : 6 (1 cement : 3 fine sand : 6 graded well burnt brick aggregate 20 mm nominal size) painting two coats of coal tar to sides of chowkhats and making good the damages to walls and floors as required including disposal of rubbish to the dumping ground with all leads and lifts **complete as per direction of the Engineer in charge:-****

13.13.1 Door chowkhats.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			
	a. Materials:				
	CC 1:3:6 (Rate as per item No. 4.2.11) "A"	Cum	0.0317	₹ 6,656.30	₹ 211.00
	Painting with coal tar "B" (12.43 item)	Sqm	0.538	₹ 34.50	₹ 18.56
	White/ colour washing in repaired portion "C" (12.21 item)	sqm.	0.276	₹ 20.10	₹ 5.55
	b. Carriage:				
	Cement material	[already included in			
	c. Labours:				
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
0220	Mason 2nd Class	Day	0.50	₹ 380.00	₹ 190.00
0203	Belder	Day	0.75	₹ 300.00	₹ 225.00
0212	Coolie (female)	Day	0.10	₹ 300.00	₹ 30.00
0205	Waterman	Day	0.10	₹ 300.00	₹ 30.00
	d. Chiesel, raking tools, wire brushes, pumps for water, scaffolding etc: (LS) ex/c "A", "B" & "C"	1.0%	on	₹ 490.00	₹ 4.90
	e. CC 1:2:4 to fill chases & CM 1:3 for repair etc (LS) ex/c "A", "B",&"C".	1.0%	on	₹ 494.90	₹ 4.95
	f. Water charges: @ 1% on total ex/c "A", "B",&"C".	1%	on	₹ 499.85	₹ 5.00
	g. Sundries & contingencies: @ 3% on total ex/c "A", "B",&"C".	3%	on	₹ 504.85	₹ 15.15
	h. Contractor's profit & overheads: @ 15% on total ex/c "A", "B",&"C".	15%	on	₹ 520.00	₹ 78.00
	Total cost for 1 No.			Total	₹ 833.11

Say, ₹ 833.10

13.13.2 Window chowkhats.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			
	a. Materials:				
	CC 1:3:6 (Rate as per item No. 4.2.11) "A"	Cum	0.0212	₹ 6,656.30	₹ 141.11
	Painting with coal tar "B" (12.43 item)	Sqm	0.520	₹ 34.50	₹ 17.94
	White/ colour washing in repaired portion "C" (12.21 item)	sqm.	0.092	₹ 20.10	₹ 1.85
	b. Carriage:				
	Cement material	[already included in			
	c. Labours:				
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0220	Mason 2nd Class	Day	0.30	₹ 380.00	₹ 114.00
0203	Belder	Day	0.30	₹ 300.00	₹ 90.00
0212	Coolie (female)	Day	0.08	₹ 300.00	₹ 24.00
0205	Waterman	Day	0.08	₹ 300.00	₹ 24.00
	d. Chiesel, raking tools, wire brushes, pumps for water, scaffolding etc: (LS) ex/c "A", "B" & "C"	1.0%	on	₹ 270.00	₹ 2.70
	e. CC 1:2:4 to fill chases & CM 1:3 for repair etc (LS) ex/c "A", "B" & "C"	1.0%	on	₹ 272.70	₹ 2.73
	f. Water charges: @ 1% on total ex/c "A", "B" & "C"	1%	on	₹ 275.43	₹ 2.75
	g. Sundries & contingencies: @ 3% on total ex/c "A", "B" & "C"	3%	on	₹ 278.18	₹ 8.35
	h. Contractor's profit & overheads: @ 15% on total ex/c "A", "B" & "C"	15%	on	₹ 286.53	₹ 42.98
	Total cost for 1 No.			Total	₹ 490.41
				Say,	₹ 490.40

13.13.3 Clerestory Window chowkhats.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			
	a. Materials:				
	CC 1:3:6 (Rate as per item No. 4.2.11) "A"	Cum	0.0106	₹ 6,656.30	₹ 70.56
	Painting with coal tar "B" (12.43 item)	Sqm	0.320	₹ 34.50	₹ 11.04
	White/ colour washing in repaired portion "C" (12.21 item)	sqm.	0.046	₹ 20.10	₹ 0.92
	b. Carriage:				
	Cement material	[already included in			
	c. Labours:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0220	Mason 2nd Class	Day	0.25	₹ 380.00	₹ 95.00
0203	Belder	Day	0.25	₹ 300.00	₹ 75.00
0212	Coolie (female)	Day	0.08	₹ 300.00	₹ 24.00
0205	Waterman	Day	0.08	₹ 300.00	₹ 24.00
	d. Chiesel, raking tools, wire brushes, pumps for water, scaffolding etc: (LS) ex/c "A", "B" & "C"	1.0%	on	₹ 230.00	₹ 2.30
	e. CC 1:2:4 to fill chases & CM 1:3 for repair etc (LS) ex/c "A", "B" & "C"	1.0%	on	₹ 232.30	₹ 2.32
	f. Water charges: @ 1% on total ex/c "A", "B" & "C"	1%	on	₹ 234.62	₹ 2.35
	g. Sundries & contingencies: @ 3% on total ex/c "A", "B" & "C"	3%	on	₹ 236.97	₹ 7.11
	h. Contractor's profit & overheads: @ 15% on total ex/c "A", "B" & "C"	15%	on	₹ 244.08	₹ 36.61
	Total cost for 1 No.			Total	₹ 363.21
				Say,	₹ 363.20

13.14 Fixing chowkhat in existing opening in brick/ RCC wall with dash fasteners/ Chemical fasteners of appropriate size (3 nos on each vertical member of door chowkhat and 2 nos on each vertical member of window chowkhats), including Cost of dash fasteners/ chemical fastener.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 chowkhat.	Each			
	a. Materials:				
11012	Dash fastner/ chemical fastener	each	6	₹ 14.00	₹ 84.00
	c. Labours:				
0220	Mason 2nd Class	Day	0.0084	₹ 380.00	₹ 3.19
0203	Belder	Day	0.0270	₹ 300.00	₹ 8.10
0212	Coolie (female)	Day	0.0195	₹ 300.00	₹ 5.85
0224	Mate	Day	0.0012	₹ 300.00	₹ 0.36
	d. Water charges: @ 1% on total	1%	on	₹ 101.50	₹ 1.02
	e. Sundries & contingencies i/c Hire charges of drill machine hire charges, Scaffolding, malba: @ 5% on total	5%	on	₹ 102.52	₹ 5.13
	f. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 107.65	₹ 16.15
	Total cost for 1 No.			Total	₹ 123.80
				Say,	₹ 123.80

13.15 Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per directions of Engineer-In-Charge.

13.15.1 For door/ window/ clerestory window

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one opening of size 0.90x2.10m = 1.89 sqm	sqm			
	a. Materials:				
	Cement mortar 1:6 (1 cement: 6 fine sand) Rate as per Item Number 3.1.6 of SH: Mortars	Cum	0.0100	₹ 2,377.25	₹ 23.77
	b. Carriage:				
	Cement material	[already included in			
	c. Labours:				
0220	Mason 2nd Class	Day	0.50	₹ 380.00	₹ 190.00
0203	Belder	Day	1.20	₹ 300.00	₹ 360.00
0212	Coolie (female)	Day	0.40	₹ 300.00	₹ 120.00
	d. Chiesel, raking tools, wire brushes, pumps for water, scaffolding etc: (LS)	3.0%	on	₹ 670.00	₹ 20.10
	e. CC 1:2:4 to fill chases & CM 1:3 for repair etc (LS) ex/c "A", "B" & "C"	1.0%	on	₹ 690.10	₹ 6.90
	f. Water charges: @ 1% on total.	1%	on	₹ 697.00	₹ 6.97
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 703.97	₹ 21.12
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 725.09	₹ 108.76
	Total cost for 1.89sqm			Total	₹ 857.62
	Total cost for 1 sqm			Total	₹ 453.77
				Say,	₹ 453.80

13.16 Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:

13.16.1 Float glass panes of thickness 4 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	Sqm.			
	a. Materials:				
08146	Float glass panes of thickness 4 mm	Sqm.	1.100	₹ 360.00	₹ 396.00
13003	Putty for wood work	Kg.	0.700	₹ 35.00	₹ 24.50
	b. Carriage:				
	Glass panes of 4 mm thick	LS	1.5	₹ 1.20	₹ 1.80
	Putty for wood work	LS	0.5	₹ 1.20	₹ 0.60

c. Labours:						
0224	Mate	Day	0.01	₹	300.00	₹ 3.00
0217	Glazier	Day	0.16	₹	380.00	₹ 60.80
0203	Belder	Day	0.16	₹	300.00	₹ 48.00
d. Nails, rags cotton, scaffolding etc: (LS)		1.0%	on	₹	534.70	₹ 5.35
e. Painting or varnishing or bee waxing etc (LS)		1.0%	on	₹	540.05	₹ 5.40
f. Water charges: @ 1% on total.		1%	on	₹	545.45	₹ 5.45
g. Sundries & contingencies: @ 3% on total.		3%	on	₹	550.90	₹ 16.53
h. Contractor's profit & overheads: @ 15% on total.		15%	on	₹	567.43	₹ 85.11
Total cost for 1 sqm.				Total	₹	652.54
				Say,	₹	652.50

13.16.2 Float glass panes of thickness 5.5 mm

Code	Description	Unit	Quantity	Rate	Amount
Details of cost for 1 Sqm.		Sqm.			
a. Materials:					
08147	Float glass panes of thickness 5.5 mm	Sqm.	1.100	₹ 535.00	₹ 588.50
13003	Putty for wood work	Kg.	0.700	₹ 35.00	₹ 24.50
b. Carriage:					
	Float glass panes of thickness 5.5 mm	LS	1.75	₹ 1.20	₹ 2.10
	Putty for wood work	LS	0.50	₹ 1.20	₹ 0.60
c. Labours:					
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0217	Glazier	Day	0.16	₹ 380.00	₹ 60.80
0203	Belder	Day	0.16	₹ 300.00	₹ 48.00
d. Nails, rags cotton, scaffolding etc: (LS)		1.0%	on	₹ 727.50	₹ 7.28
e. Painting or varnishing or bee waxing etc (LS)		1%	on	₹ 734.78	₹ 7.35
f. Water charges: @ 1% on total.		1%	on	₹ 742.13	₹ 7.42
g. Sundries & contingencies: @ 3% on total.		3%	on	₹ 749.55	₹ 22.49
h. Contractor's profit & overheads: @ 15% on total.		15%	on	₹ 772.04	₹ 115.81
Total cost for 1 sqm.				Total	₹ 887.85
				Say,	₹ 887.90

13.17 Renewing glass panes, with wooden fillets wherever necessary:

13.17.1 Float glass panes of thickness 4 mm

Code	Description	Unit	Quantity	Rate	Amount
Details of cost for 1 Sqm.		Sqm.			
a. Materials:					
08146	Float glass panes of thickness 4 mm	Sqm.	1.100	₹ 360.00	₹ 396.00
b. Carriage:					
	Float glass panes of thickness 4 mm	LS	1.50	₹ 1.20	₹ 1.80
c. Labours:					
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0217	Glazier	Day	0.25	₹ 380.00	₹ 95.00
0203	Belder	Day	0.25	₹ 300.00	₹ 75.00
d. Nails, rags cotton, scaffolding etc: (LS)		1.0%	on	₹ 573.80	₹ 5.74
e. Painting or varnishing or bee waxing etc (LS)		1%	on	₹ 579.54	₹ 5.80
f. Water charges: @ 1% on total.		1%	on	₹ 585.34	₹ 5.85
g. Sundries & contingencies: @ 3% on total.		3%	on	₹ 591.19	₹ 17.74
h. Contractor's profit & overheads: @ 15% on total.		15%	on	₹ 608.93	₹ 91.34
Total cost for 1 sqm.				Total	₹ 700.27
				Say,	₹ 700.30

13.17.2 Float glass panes of thickness 5.5 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	Sqm.			
	a. Materials:				
08147	Float glass panes of thickness 5.5 mm	Sqm.	1.100	₹ 535.00	₹ 588.50
	b. Carriage:				
	Float glass panes of thickness 5.5 mm	LS	1.75	₹ 1.20	₹ 2.10
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0217	Glazier	Day	0.25	₹ 380.00	₹ 95.00
0203	Belder	Day	0.25	₹ 300.00	₹ 75.00
	d. Nails, rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 766.60	₹ 7.67
	e. Painting or varnishing or bee waxing etc (LS)	1.0%	on	₹ 774.27	₹ 7.74
	f. Water charges: @ 1% on total.	1%	on	₹ 782.01	₹ 7.82
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 789.83	₹ 23.69
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 813.52	₹ 122.03
	Total cost for 1 sqm.			Total	₹ 935.55
				Say,	₹ 935.60

13.18 Renewing glass panes and refixing existing wooden fillets:

13.18.1 Float glass panes of thickness 4 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	Sqm.			
	a. Materials:				
08146	Float glass panes of thickness 4 mm	Sqm.	1.100	₹ 360.00	₹ 396.00
	b. Carriage:				
	Float glass panes of thickness 4 mm	LS	1.50	₹ 1.20	₹ 1.80
	c. Labours:				
0217	Glazier	Day	0.30	₹ 380.00	₹ 114.00
0203	Belder	Day	0.30	₹ 300.00	₹ 90.00
	d. Nails, rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 601.80	₹ 6.02
	e. Painting or varnishing or bee waxing, Methyated sprit etc (LS)	1%	on	₹ 607.82	₹ 6.08
	f. Water charges: @ 1% on total.	1%	on	₹ 613.90	₹ 6.14
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 620.04	₹ 18.60
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 638.64	₹ 95.80
	Total cost for 1 sqm.			Total	₹ 734.44
				Say,	₹ 734.40

13.18.2 Float glass panes of thickness 5.5 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	Sqm.			
	a. Materials:				
08147	Float glass panes of thickness 5.5 mm	Sqm.	1.100	₹ 535.00	₹ 588.50
	b. Carriage:				
	Float glass panes of thickness 5.5 mm	LS	1.75	₹ 1.20	₹ 2.10
	c. Labours:				
0217	Glazier	Day	0.25	₹ 380.00	₹ 95.00
0203	Belder	Day	0.25	₹ 300.00	₹ 75.00
	d. Nails, rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 760.60	₹ 7.61
	e. Painting or varnishing or bee waxing, Methyated sprit etc (LS)	1.0%	on	₹ 768.21	₹ 7.68
	f. Water charges: @ 1% on total.	1%	on	₹ 775.89	₹ 7.76
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 783.65	₹ 23.51
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 807.16	₹ 121.07
	Total cost for 1 sqm.			Total	₹ 928.23
				Say,	₹ 928.20

13.19 Supplying and fixing new wooden fillets wherever necessary:**13.19.1 Local teak wood fillets.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Mtr.	Mtr.			
	a. Materials:				
13005	Local teak wood fillets.	Cum.	0.0011	₹ 31,465.00	₹ 34.61
	b. Carriage:				
0473	Local teak wood fillets.	Cum.	0.0011	₹ 80.65	₹ 0.09
	c. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0210	Carpenter 2nd class	Day	0.25	₹ 380.00	₹ 95.00
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	d. Nails, rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 162.70	₹ 1.63
	e. Painting or varnishing or bee waxing etc (LS)	15.0%	on	₹ 164.33	₹ 24.65
	f. Water charges: @ 1% on total.	1%	on	₹ 188.98	₹ 1.89
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 190.87	₹ 5.73
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 196.60	₹ 29.49
				Total	₹ 226.09
				Total cost for 1 Mtr.	₹ 22.61
				Say,	₹ 22.60

13.19.2 Gamair wood fillets.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Mtr.	Mtr.			
	a. Materials:				
13006	Gamir wood fillets.	Cum.	0.0011	₹ 34,326.00	₹ 37.76
	b. Carriage:				
0473	Gamir wood fillets.	Cum.	0.0011	₹ 80.65	₹ 0.09
	c. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0210	Carpenter 2nd class	Day	0.25	₹ 380.00	₹ 95.00
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	d. Nails, rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 165.85	₹ 1.66
	e. Painting or varnishing or bee waxing etc (LS)	15.0%	on	₹ 167.51	₹ 25.13
	f. Water charges: @ 1% on total.	1%	on	₹ 192.64	₹ 1.93
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 194.57	₹ 5.84
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 200.41	₹ 30.06
				Total	₹ 230.47
				Total cost for 1 Mtr.	₹ 23.05
				Say,	₹ 23.10

13.19.3 Soft wood fillets

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Mtr.	Mtr.			
	a. Materials:				
13007	Soft wood fillets.	Cum.	0.0011	₹ 12,960.00	₹ 14.26
	b. Carriage:				
0473	Soft wood fillets.	Cum.	0.0011	₹ 80.65	₹ 0.09
	c. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0210	Carpenter 2nd class	Day	0.25	₹ 380.00	₹ 95.00
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	d. Nails, rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 142.35	₹ 1.42
	e. Painting or varnishing or bee waxing etc (LS)	15.0%	on	₹ 143.77	₹ 21.57
	f. Water charges: @ 1% on total.	1%	on	₹ 165.34	₹ 1.65
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 166.99	₹ 5.01

h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	172.00	₹	25.80
				Total	₹	197.80
	Total cost for 1 Mtr.				₹	19.78
				Say,	₹	19.80

13.20 Renewal of old putty of glass panes (length).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Mtr.	Mtr.			
	a. Materials:				
13003	Putty for wood work	Kg.	0.8400	₹ 35.00	₹ 29.40
	b. Carriage:				
0.00	Putty for wood work	LS	0.5	₹ 1.20	₹ 0.60
	c. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0210	Carpenter 2nd class	Day	0.15	₹ 380.00	₹ 57.00
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
	d. Rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 120.00	₹ 1.20
	e. Painting or varnishing or bee waxing etc (LS)	1.0%	on	₹ 121.20	₹ 1.21
	f. Water charges: @ 1% on total.	1%	on	₹ 122.41	₹ 1.22
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 123.63	₹ 3.71
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 127.34	₹ 19.10
				Total	₹ 146.44
	Total cost for 1 Mtr.				₹ 14.64
				Say,	₹ 14.60

13.21 Refixing old glass panes with putty and nails.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 Sqm.	Sqm.			
	a. Materials:				
13003	Putty for wood work	Kg.	0.7000	₹ 35.00	₹ 24.50
	b. Carriage:				
0.00	Putty for wood work	LS	0.5	₹ 1.00	₹ 0.50
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0210	Carpenter 2nd class	Day	0.20	₹ 380.00	₹ 76.00
0212	Helper	Day	0.20	₹ 300.00	₹ 60.00
	d. Rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 167.00	₹ 1.67
	e. Painting or varnishing or bee waxing etc (LS)	1.0%	on	₹ 168.67	₹ 1.69
	f. Water charges: @ 1% on total.	1%	on	₹ 170.36	₹ 1.70
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 172.06	₹ 5.16
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 177.22	₹ 26.58
	Total cost for 1 sqm.			Total	₹ 203.80
				Say,	₹ 203.80

13.22 Fixing old glass panes with wooden fillets (excluding cost of fillets).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0217	Glazier	Day	0.20	₹ 380.00	₹ 76.00
0203	Belder	Day	0.20	₹ 300.00	₹ 60.00
	b. Nails, rags cotton, scaffolding etc: (LS)	10.0%	on	₹ 142.00	₹ 14.20
	c. Painting or varnishing or bee waxing etc (LS)	20.0%	on	₹ 156.20	₹ 31.24
	d. Water charges: @ 1% on total.	1%	on	₹ 187.44	₹ 1.87
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 189.31	₹ 5.68

f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 194.99	₹ 29.25
	Total cost for 1 sqm.		Total	₹ 224.24
			Say,	₹ 224.20

13.23 Renewing wooden battens in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture as required including removal of rubbish to the dumping ground with all leads and lifts complete as per direction of the Engineer in charge:-

13.23.1 Sal wood.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.300 Cum.	Cum.			
	a. Materials:				
13008	Sal wood batten	Cum.	0.3060	₹ 29,160.00	₹ 8,922.96
	Painting with oil type wood preservative (item 12.41) "A"	Sqm.	36.00	₹ 33.00	₹ 1,188.00
	b. Carriage:				
0473	Sal wood batten	Cum.	0.3060	₹ 80.65	₹ 24.68
	c. Labours:				
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0210	Carpenter 2nd class	Day	0.50	₹ 380.00	₹ 190.00
0212	Helper	Day	0.65	₹ 300.00	₹ 195.00
0220	Mason 2nd class	Day	0.10	₹ 380.00	₹ 38.00
0203	Belder	Day	0.10	₹ 300.00	₹ 30.00
0227	Painter	Day	0.10	₹ 340.00	₹ 34.00
	d. Nails, rags cotton, scaffolding etc: (LS) ex/c "A"	1.0%	on	₹ 9,452.64	₹ 94.53
	e. Water charges: @ 1% on total.	1%	on	₹ 9,547.17	₹ 95.47
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 9,642.64	₹ 289.28
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 9,931.92	₹ 1,489.79
				Total	₹ 12,609.71
				Total cost for 1 Cum.	₹ 42,032.37
				Say,	₹ 42,032.40

13.23.2 Karai wood.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.300 Cum.	Cum.			
	a. Materials:				
13009	Karai wood batten	Cum.	0.3060	₹ 22,680.00	₹ 6,940.08
	Painting with oil type wood preservative (item)	Sqm.	36.00	₹ 33.00	₹ 1,188.00
	b. Carriage:				
0473	Karai wood batten	Cum.	0.3060	₹ 80.65	₹ 24.68
	c. Labours:				
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0210	Carpenter 2nd class	Day	0.50	₹ 380.00	₹ 190.00
0212	Helper	Day	0.65	₹ 300.00	₹ 195.00
0220	Mason 2nd class	Day	0.10	₹ 380.00	₹ 38.00
0203	Belder	Day	0.10	₹ 300.00	₹ 30.00
0227	Painter	Day	0.10	₹ 340.00	₹ 34.00
	d. Nails, rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 7,469.76	₹ 74.70
	e. Water charges: @ 1% on total.	1%	on	₹ 7,544.46	₹ 75.44
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 7,619.90	₹ 228.60
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 7,848.50	₹ 1,177.28
				Total	₹ 10,213.78
				Total cost for 1	₹ 34,045.93
				Say,	₹ 19,890.70

13.23.3 Soft wood.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.300 Cum.	Cum.			
	a. Materials:				
13010	Soft wood batten	Cum.	0.3060	₹ 12,960.00	₹ 3,965.76
	Painting with oil type wood preservative (item)	Sqm.	36.00	₹ 33.00	₹ 1,188.00
	b. Carriage:				
0473	Soft wood batten	Cum.	0.3060	₹ 80.65	₹ 24.68
	c. Labours:				
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0210	Carpenter 2nd class	Day	0.50	₹ 380.00	₹ 190.00
0212	Helper	Day	0.65	₹ 300.00	₹ 195.00
0220	Mason 2nd class	Day	0.10	₹ 380.00	₹ 38.00
0203	Belder	Day	0.10	₹ 300.00	₹ 30.00
0227	Painter	Day	0.10	₹ 340.00	₹ 34.00
	d. Nails, rags cotton, scaffolding etc: (LS)	1.0%	on	₹ 4,495.44	₹ 44.95
	e. Water charges: @ 1% on total.	1%	on	₹ 4,540.39	₹ 45.40
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 4,585.79	₹ 137.57
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 4,723.36	₹ 708.50
				Total	₹ 6,619.86
	Total cost for 1 Cum.				₹ 22,066.20
				Say,	₹ 22,066.20

13.24 Renewing wooden beams in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture as required including removal of rubbish to the dumping ground with all leads and lifts complete as per direction of the Engineer in charge:-

13.24.1 Not exceeding 4.0 metre in length:-

13.24.1.1 Sal wood.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.2625 Cum.	Cum.			
	a. Materials:				
08288	Sal wood beam	Cum.	0.2625	₹ 45,000.00	₹ 11,812.50
	Painting with oil type wood preservative (item)	Sqm.	4.00	₹ 33.00	₹ 132.00
	b. Carriage:				
0473	Sal wood beam	Cum.	0.2625	₹ 80.65	₹ 21.17
	c. Labours:				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0210	Carpenter 2nd class	Day	0.80	₹ 380.00	₹ 304.00
0212	Helper	Day	0.80	₹ 300.00	₹ 240.00
0220	Mason 2nd class	Day	0.15	₹ 380.00	₹ 57.00
0203	Belder	Day	0.75	₹ 300.00	₹ 225.00
0205	Waterman	Day	0.10	₹ 300.00	₹ 30.00
	d. Chiesels, nails, cement mortar, ropes, packing pieces, scaffolding etc: (LS)	0.750%	on	₹ 12,719.67	₹ 95.40
	e. Water charges: @ 1% on total.	1%	on	₹ 12,815.07	₹ 128.15
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 12,943.22	₹ 388.30
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 13,331.52	₹ 1,999.73
				Total	₹ 15,463.25
	Total cost for 1				₹ 58,907.62
				Say,	₹ 58,907.60

13.24.1.2 Karai wood.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.2625 Cum.	Cum.			
	a. Materials:				
08289	Karai wood beam	Cum.	0.2625	₹ 38,000.00	₹ 9,975.00
	Painting with oil type wood preservative (item)	Sqm.	4.00	₹ 33.00	₹ 132.00
	b. Carriage:				

0473	Karai wood beam	Cum.	0.2625	₹	80.65	₹	21.17
	c. Labours:						
0224	Mate	Day	0.10	₹	300.00	₹	30.00
0210	Carpenter 2nd class	Day	0.80	₹	380.00	₹	304.00
0212	Helper	Day	0.80	₹	300.00	₹	240.00
0220	Mason 2nd class	Day	0.15	₹	380.00	₹	57.00
0203	Belder	Day	0.75	₹	300.00	₹	225.00
0205	Waterman	Day	0.10	₹	300.00	₹	30.00
	d. Chiesels, nails, cement mortar, ropes, packing pieces, scaffolding etc: (LS)	0.750%	on	₹	10,882.17	₹	81.62
	e. Water charges: @ 1% on total.	1%	on	₹	10,963.79	₹	109.64
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹	11,073.43	₹	332.20
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	11,405.63	₹	1,710.84
					Total	₹	13,248.47
					Total cost for 1	₹	50,470.36
					Say,	₹	50,470.40

13.24.2 Above 4.0 m and upto 5.0 m in length:-

13.24.2.1 Sal wood.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.600 Cum.	Cum.			
	a. Materials:				
08288	Sal wood beam	Cum.	0.6000	₹ 45,000.00	₹ 27,000.00
	Painting with oil type wood preservative (item)	Sqm.	7.24	₹ 33.00	₹ 238.92
	b. Carriage:				
0473	Sal wood beam	Cum.	0.6000	₹ 80.65	₹ 48.39
	c. Labours:				
0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0210	Carpenter 2nd class	Day	0.95	₹ 380.00	₹ 361.00
0212	Helper	Day	0.95	₹ 300.00	₹ 285.00
0220	Mason 2nd class	Day	0.15	₹ 380.00	₹ 57.00
0203	Belder	Day	1.00	₹ 300.00	₹ 300.00
0205	Waterman	Day	0.10	₹ 300.00	₹ 30.00
	d. Chiesels, nails, cement mortar, ropes, packing pieces, scaffolding etc: (LS)	2.00%	on	₹ 28,120.39	₹ 562.41
	e. Water charges: @ 1% on total.	1%	on	₹ 28,682.80	₹ 286.83
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 28,969.63	₹ 869.09
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 29,838.72	₹ 4,475.81
				Total	₹ 34,553.45
				Total cost for 1	₹ 57,589.08
				Say,	₹ 57,589.10

13.24.2.2 Karai wood.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.600 Cum.	Cum.			
	a. Materials:				
08289	Karai wood beam	Cum.	0.6000	₹ 38,000.00	₹ 22,800.00
	Painting with oil type wood preservative (item)	Sqm.	7.24	₹ 33.00	₹ 238.92
	b. Carriage:				
0473	Karai wood beam	Cum.	0.6000	₹ 80.65	₹ 48.39
	c. Labours:				
0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0210	Carpenter 2nd class	Day	0.95	₹ 380.00	₹ 361.00
0212	Helper	Day	0.95	₹ 300.00	₹ 285.00
0220	Mason 2nd class	Day	0.15	₹ 380.00	₹ 57.00
0203	Belder	Day	1.00	₹ 300.00	₹ 300.00
0205	Waterman	Day	0.10	₹ 300.00	₹ 30.00
	d. Chiesels, nails, cement mortar, ropes, packing pieces, scaffolding etc: (LS)	2.00%	on	₹ 23,920.39	₹ 478.41
	e. Water charges: @ 1% on total.	1%	on	₹ 24,398.80	₹ 243.99

f. Sundries & contingencies: @ 3% on total.	3%	on	₹	24,642.79	₹	739.28
g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	25,382.07	₹	3,807.31
				Total	₹	29,428.30
				Total cost for 1 Cum.	₹	49,047.17
				Say,	₹	49,047.20

STEEL WORK

- 13.25 Providing and fixing 16 mm dia M.S. fan clamps of standard shape and size in existing RCC slab including cutting chase and making good and painting exposed portion of the clamps as required including disposal of rubbish etc. to the dumping ground with all leads and lifts complete as per direction of the Engineer in charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			
	a. Materials:				
05039	MS Bar	Qtl.	0.63200	₹ 4,010.00	₹ 2,534.32
	CC 1:2:4 with stone 20 mm (Rate as per item No. 4.1.3)	Cum	0.05625	₹ 8,086.90	₹ 454.89
	b. Carriage:				
0468	MS Bar	Tonne	0.0632	₹ 110.94	₹ 7.01
	CC 1:2:4	[already included in			
	c. Labours:				
0224	Mate	Day	0.92	₹ 300.00	₹ 276.00
0215	Fitter	Day	5.00	₹ 380.00	₹ 1,900.00
0220	Mason 2nd Class	Day	7.50	₹ 380.00	₹ 2,850.00
0203	Belder	Day	7.50	₹ 300.00	₹ 2,250.00
0227	Painter	Day	3.00	₹ 340.00	₹ 1,020.00
	d. Paint, Cement mortar, scaffolding etc: (LS)	20.0%	on	₹ 11,292.22	₹ 2,258.44
	e. Water charges: @ 1% on total.	1%	on	₹ 13,550.66	₹ 135.51
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 13,686.17	₹ 410.59
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 14,096.76	₹ 2,114.51
				Total	₹ 16,211.27
				Total cost for 1 No.	₹ 162.11
				Say,	₹ 162.10

- 13.26 Fixing of old wind tie with new fittings including painting two or or more coats with anticorrosive bitumastic paint of approved brand and manufacture over and including priming coat of zinc chromate yellow primer of approved brand and manufacture as required complete as per direction of the Engineer in charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 24.20 Mtr.	Mtr.			
	a. Materials:				
11020	J or L hooks	10 Nos	81.00	₹ 125.00	₹ 1,012.50
11006	Bitumen washers	100Nos	81.00	₹ 32.00	₹ 25.92
11017	GI limpet washers	100Nos	81.00	₹ 37.00	₹ 29.97
	Applying priming coat (item 12.33.3).	Sqm.	2.226	₹ 26.80	₹ 59.66
	Applying anti corrosive bitumastic paint (item 12.40).	Sqm.	2.226	₹ 61.00	₹ 135.79
	b. Carriage:				
0468	J or L hooks	LS	1.0	₹ 1.20	₹ 1.20
	Bitumen washers	LS	0.5	₹ 1.20	₹ 0.60
	GI limpet washers	LS	0.5	₹ 1.20	₹ 0.60
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0215	Fitter	Day	0.40	₹ 380.00	₹ 152.00
0212	Helper	Day	0.40	₹ 300.00	₹ 120.00
	d. Ropes, scaffolding etc: (LS) ex/c "A"	7.0%	on	₹ 1,351.79	₹ 94.63
	e. Water charges: @ 1% on total.	1%	on	₹ 1,446.42	₹ 14.46
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,460.88	₹ 43.83
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,504.71	₹ 225.71

Total	₹	1,925.87
Total cost for 1 Mtr.	₹	79.58
Say,	₹	79.60

- 13.27 Renewing bottom rail and / or top runner of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacture as required including removal of rubbish to the dumping ground with all leads and lifts complete as per direction of the Engineer in charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 13.57 Kg.	Kg.			
	a. Materials:				
05056	MS tee= 14 Kg.	Qtl.	0.140	₹ 4,267.00	₹ 597.38
05017	Bolts & nuts upto 300mm dia =0.83 Kg.	Kg.	0.83	₹ 6,749.00	₹ 56.02
	Priming coat of zinc chromate yellow primer (item 12.31.3) A	Sqm.	0.3830	₹ 26.80	₹ 10.26
	CC 1:3:6 (item) B	Cum	0.0075	₹ 6,415.70	₹ 48.12
	CC 1:2:4 (item) C	Cum	0.0728	₹ 6,968.40	₹ 507.30
	b. Carriage:				
0468	MS tee.	Tonne	0.00010	₹ 110.94	₹ 0.01
0468	Bolts & nuts upto 300mm dia.	Tonne	0.00083	₹ 110.94	₹ 0.09
	c. Labours:				
0224	Mate	Day	0.20	₹ 300.00	₹ 60.00
0215	Fitter	Day	0.13	₹ 380.00	₹ 47.50
0212	Helper	Day	0.63	₹ 300.00	₹ 187.50
0203	Belder	Day	3.00	₹ 300.00	₹ 900.00
0210	Carpenter 2nd class	Day	0.50	₹ 380.00	₹ 190.00
0220	Mason 2nd class	Day	0.50	₹ 380.00	₹ 190.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	d. Broken tiles or materials for broken portion of flooring etc: (LS) ex/c A, B & C.	10.00%	on	₹ 2,273.50	₹ 227.35
	e. Chiesels, nails, cement mortar, ropes, packing pieces, scaffolding etc: (LS)	5.00%	on	₹ 2,500.85	₹ 125.04
	f. Water charges: @ 1% on total.	1%	on	₹ 2,625.89	₹ 26.26
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 2,652.15	₹ 79.56
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 2,731.71	₹ 409.76
				Total	₹ 3,707.15
				Total cost for 1 Kg.	₹ 273.19
				Say,	₹ 273.20

- 13.28 Dismantling rolling shutters with all accessories and stacking properly and refitting the same after oiling and greasing the same with necessary cement concrete for fitting fixing of hold fasts etc. for all lifts and upto a lead of 50 m as required complete as per direction of the Engineer in charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5.5 Sqm.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.20	₹ 300.00	₹ 60.00
0220	Mason 2nd class	Day	1.00	₹ 380.00	₹ 380.00
0203	Belder	Day	2.00	₹ 300.00	₹ 600.00
0212	Coolie	Day	2.00	₹ 300.00	₹ 600.00
0205	Waterman	Day	0.10	₹ 300.00	₹ 30.00
	b. CC, CM, etc for refitting, oiling, greasing the shutter etc: (LS)	35.00%	on	₹ 1,670.00	₹ 584.50
	c. Chiesels, raking tools, wire brushes, pumps for water, scaffolding etc: (LS)	20.00%	on	₹ 2,254.50	₹ 450.90
	d. Water charges: @ 1% on total.	1%	on	₹ 2,705.40	₹ 27.05
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 2,732.45	₹ 81.97
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 2,814.42	₹ 422.16
				Total	₹ 3,236.58
				Total cost for 1 sqm.	₹ 588.47

Say, ₹ 588.50

- 13.29 Dismantling rolling shutters with all accessories and stacking properly and refitting the same after oiling and greasing the same with necessary cement concrete for fitting fixing of hold fasts etc. for all lifts and upto a lead of 50 m as required complete as per direction of the Engineer in charge.**

13.29.1 Wheel 50 mm dia and below

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 nos wheels of 40 mm dia	each			
	MATERIAL				
	Weight of 10 nos wheels				
	$10 \times [3.14 \times \{(4/2) \times (4/2)\} \times 4] \times 7.850/1000 = 3.94 \text{ kg}$				
	Weight of 10 nos clamps 6 mm thick = 10x lenth of clamp = 10x0.17m @ 1.90kg/m = 3.23 kg				
	Weight of 10 nos 10 mm dia. Bolts, 10 cm long				
	$10 \times 0.10 \text{m} = 1 \text{m} @ 0.60 \text{ kg/m} = 0.60 \text{ kg}$ Total = 7.70 kg say 8 kg				
	Labour for dismantling :				
0207	Blacksmith 2nd class	Day	0.01	₹ 380.00	₹ 3.80
0205	Bandhani	Day	0.01	₹ 300.00	₹ 3.00
0203	Beldar	Day	0.02	₹ 300.00	₹ 6.00
	Renewing the wheels with clamps :				
	MATERIAL				
13017	Wheel 75 mm dia. 40 mm wide 10 nos clamps out of M.S. flat 40x6 mm, 170 mm long = 10x0.17m = 1.70m @ 1.9 kg/m = 3.23 kg Add 5% wastage = 0.16 kg Total = 3.39 kg say 3.50 kg	each	10.00	₹ 80.00	₹ 800.00
05026	Flats upto 10 mm in thickness M.S. bolt/pin 10 mm dia 10 cm long 10 Nos $10 \times 0.06 = 0.6 \text{ kg} = 0.006$	qtl.	0.035	₹ 3,992.00	₹ 139.72
05017	Bolts and nuts upto 300 mm in length	qtl.	0.006	₹ 6,749.00	₹ 40.49
09022	Welding by electric plant length = 10x(2x4) = 80cm	cm	80.000	₹ 2.00	₹ 160.00
	LABOUR				
	Labour for cutting, assembling and erection charges				
0207	Blacksmith 2nd class	Day	0.03	₹ 380.00	₹ 11.40
0205	Bandhani	Day	0.02	₹ 300.00	₹ 6.00
0203	Beldar	Day	0.11	₹ 300.00	₹ 33.00
	Priming coat : = $10 \times 2(0.06 + 0.008) \times 0.25 \text{m} = 0.34 \text{ sqm}$ on Tees $0.16 \times 3.3 = 0.53 \text{ sqm}$	sqm	0.165	₹ 26.80	₹ 4.42
	Rate as per item no 12.33.3 of SH : Finishing "A"				
	b. Water charges: @ 1% on total except A	1%	on	₹ 1,203.41	₹ 12.03
	c. Sundries & contingencies: @ 3% on total except A	3%	on	₹ 1,215.44	₹ 36.46
	d. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,251.90	₹ 187.79
				Total	₹ 1,444.11
	Total cost for 1 no.				₹ 144.41
				Say,	₹ 144.40

13.29.2 Wheel above 50 mm dia

Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 10 nos wheels Considering average wheel dia =75 mm Width of wheel = 40 mm M.S. flat for clamp = 60x8 mm Bolt size 16 mm dia. Lenth of one clamp : $2 \times (0.04 + 0.0375 + 0.02) + 0.05 = 0.195 + 0.05 = 0.245 \text{ m}$ say 0.25m	each			
	MATERIAL				
	Weight of 10 nos wheels $10 \times [3.14 \times \{(7.5/2) \times (7.5/2)\} \times 4] \times 7.850/1000 = 13.87 \text{ kg}$ Weight of 10 nos clamps 8 mm thick = $10 \times 0.25 \text{ m} @ 3.8 \text{ kg/m} = 9.50 \text{ kg}$ Weight of 10 nos 16 mm dia. Bolts, 10 cm long $10 \times 0.10 \text{ m} @ 1.60 \text{ kg/m} = 1.60 \text{ kg}$ Total = 24.97 kg say 25 kg				
	Labour for dismantling :				
0207	Blacksmith 2nd class	Day	0.04	₹ 380.00	₹ 15.20
0205	Bandhani	Day	0.03	₹ 300.00	₹ 9.00
0203	Beldar	Day	0.06	₹ 300.00	₹ 18.00
	Renewing the wheels with clamps :				
	MATERIAL				
13017	10 nos clamps out of M.S. flat 60x8 mm = $10 \times 0.25 \text{ m} @ 3.8 \text{ kg/m} = 9.5 \text{ kg}$ Add 5% wastage = 0.48 kg Total = 9.98 kg say 10 kg	each	10.00	₹ 80.00	₹ 800.00
	Flats upto 10 mm in thickness				
05026	M.S. bolt/pin 16 mm dia 10 cm long 10 Nos $10 \times 0.16 = 1.6 \text{ kg} = 0.016 \text{ q}$	qtl.	0.016	₹ 3,992.00	₹ 63.87
05017	Bolts and nuts upto 300 mm in length	qtl.	0.006	₹ 6,749.00	₹ 40.49
09022	Welding by electric plant length = $10 \times (2 \times 6) = 120 \text{ cm}$	cm	120.000	₹ 2.00	₹ 240.00
	LABOUR				
	Labour for cutting, assembling and errection charges				
0207	Blacksmith 2nd class	Day	0.01	₹ 380.00	₹ 3.80
0205	Bandhani	Day	0.05	₹ 300.00	₹ 15.00
0203	Beldar	Day	0.36	₹ 300.00	₹ 108.00
	Priming coat : = $10 \times 2(0.06 + 0.008) \times 0.25 \text{ m} = 0.34 \text{ sqm}$ on Tees $0.16 \times 3.3 = 0.53 \text{ sqm}$ Rate as per item no 12.33.3 of SH : Finishing "A"	sqm	0.340	₹ 26.80	₹ 9.11
	b. Water charges: @ 1% on total except A	1%	on	₹ 1,313.36	₹ 13.13
	c. Sundries & contingencies: @ 3% on total except A	3%	on	₹ 1,326.49	₹ 39.79
	d. Contractor's profit & overheads: @ 15% on total except A	15%	on	₹ 1,366.28	₹ 204.94
				Total	₹ 1,580.33
			Total cost for 1 no.		₹ 158.03
				Say,	₹ 158.00

FINISHING WORK

13.30 Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sqm and under including cutting the patch in proper shape and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground with all leads and lifts including finishing even and smooth and curing complete as per direction of the Engineer in charge:-

13.30.1 With cement mortar 1:3 (1 cement : 3 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm			
	a. Materials:				
	Cement mortar 1:3 (Rate as per item No. 3.1.3)	Cum	0.185	₹ 3,992.09	₹ 738.54
	b. Carriage:				
	Cement mortar 1:3 item	[already included in			
	c. Labours:				

0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0220	Mason 2nd Class	Day	0.90	₹ 380.00	₹ 342.00
0203	Belder	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie (female)	Day	0.90	₹ 300.00	₹ 270.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	d. Chiesel, raking tools, wire brushes, pumps for water, scaffolding etc: (LS)	1%	on	₹ 1,731.54	₹ 17.32
	e. Water charges: @ 1% on total.	1%	on	₹ 1,748.86	₹ 17.49
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,766.35	₹ 52.99
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,819.34	₹ 272.90
				Total	₹ 2,092.24
	Total cost for 1 Sqm.				₹ 209.22
				Say,	₹ 209.20

13.30.2 With cement mortar 1:4 (1 cement : 4 fine sand).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm			
	a. Materials:				
	Cement mortar 1:3 (Rate as per item No. 3.1.4)	Cum	0.185	₹ 3,184.67	₹ 589.16
	b. Carriage:				
	Cement mortar 1:4 item	[already included in			
	c. Labours:				
0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0220	Mason 2nd Class	Day	0.90	₹ 380.00	₹ 342.00
0203	Belder	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie (female)	Day	0.90	₹ 300.00	₹ 270.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	d. Chiesel, raking tools, wire brushes, pumps for water, scaffolding etc: (LS)	1%	on	₹ 1,582.16	₹ 15.82
	e. Water charges: @ 1% on total.	1%	on	₹ 1,597.98	₹ 15.98
	f. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,613.96	₹ 48.42
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,662.38	₹ 249.36
				Total	₹ 1,911.74
	Total cost for 1 Sqm.				₹ 191.17
				Say,	₹ 191.20

13.31 Providing and applying cement slurry on old CC / RCC / Brick works in joints to receive new and fresh CC / RCC / Brick works including roughening and cleaning the old surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
03001	Cement	Tonne	0.0275	₹ 6,100.00	₹ 167.75
	b. Carriage:				
0421	Cement	Tonne	0.0275	₹ 110.94	₹ 3.05
	c. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0220	Mason 2nd class	Day	0.05	₹ 380.00	₹ 19.00
0203	Belder	Day	0.15	₹ 300.00	₹ 45.00
0205	Waterman	Day	0.05	₹ 300.00	₹ 15.00
	d. Water charges: @ 1% on total.	1%	on	₹ 252.80	₹ 2.53
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 255.33	₹ 7.66
	g. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 262.99	₹ 39.45
				Total	₹ 302.44
	Total cost for 1 sqm.				₹ 54.99
				Say,	₹ 55.00

13.32 White washing with lime to give an even shade on old work as required complete as per direction of the Engineer in charge.

13.32.1 one or more coat.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12017	White lime	Qtl	0.010	₹ 7.50	₹ 0.08
12025	Indigo	Kg.	0.003	₹ 65.00	₹ 0.20
	b. Carriage:				
0430	White lime	Tonne	0.001	₹ 130.51	₹ 0.13
	Indigo	LS	0.50	₹ 1.00	₹ 0.50
	c. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0232	White washer	Day	0.08	₹ 340.00	₹ 27.20
0212	Helper	Day	0.06	₹ 300.00	₹ 18.00
	d. Gum, putty, brushes etc: (LS)	1.00%	on	₹ 49.11	₹ 0.49
	e. Pumps for water, scaffolding etc: (LS)	1.00%	on	₹ 49.60	₹ 0.50
	f. Water charges: @ 1% on total.	1%	on	₹ 50.10	₹ 0.50
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 50.60	₹ 1.52
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 52.12	₹ 7.82
				Total	₹ 59.94
				Total cost for 1 sqm.	₹ 5.99
				Say,	₹ 6.00

13.32.2 two or more coat.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12017	White lime	Qtl	0.010	₹ 7.50	₹ 0.08
12025	Indigo	Kg.	0.003	₹ 65.00	₹ 0.20
	b. Carriage:				
0430	White lime	Tonne	0.00100	₹ 130.51	₹ 0.13
	Indigo	Tonne	0.000003	₹ 1.20	₹ -
	c. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0232	White washer	Day	0.12	₹ 340.00	₹ 40.80
0212	Helper	Day	0.08	₹ 300.00	₹ 24.00
	d. Gum, putty, brushes etc: (LS)	1.00%	on	₹ 68.21	₹ 0.68
	e. Pumps for water, scaffolding etc: (LS)	1.00%	on	₹ 68.89	₹ 0.69
	f. Water charges: @ 1% on total.	1%	on	₹ 69.58	₹ 0.70
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 70.28	₹ 2.11
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 72.39	₹ 10.86
				Total	₹ 83.25
				Total cost for 1 sqm.	₹ 8.33
				Say,	₹ 8.30

13.33 Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0232	White washer	Day	0.01	₹ 340.00	₹ 3.40
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
0203	Belder	Day	0.10	₹ 300.00	₹ 30.00
0205	Waterman	Day	0.04	₹ 300.00	₹ 12.00
	b.scaffolding, ladder, sand paper, wire brushes etc: (LS)	3.00%	on	₹ 63.40	₹ 1.90
	c. Water charges: @ 1% on total.	1%	on	₹ 65.30	₹ 0.65

d. Sundries & contingencies: @ 3% on total.	3%	on	₹	65.95	₹	1.98
e. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	67.93	₹	10.19
				Total	₹	78.12
				Total cost for 1 Sqm.	₹	7.81
				Say,	₹	7.80

13.34 Distempering with dry distemper of approved brand and manufacture and of required shade on old work (one or more coats), to give an even shade as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12018	Dry distemper	Kg.	1.000	₹ 35.00	₹ 35.00
	b. Carriage:				
	Dry distemper	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
0212	Helper	Day	0.25	₹ 300.00	₹ 75.00
	d. Gum, putty, brushes etc: (LS)	10%	on	₹ 202.20	₹ 20.22
	e. Pumps for water, scaffolding etc: (LS)	2.00%	on	₹ 222.42	₹ 4.45
	f. Water charges: @ 1% on total.	1%	on	₹ 226.87	₹ 2.27
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 229.14	₹ 6.87
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 236.01	₹ 35.40
				Total	₹ 271.41
				Total cost for 1 sqm.	₹ 27.14
				Say,	₹ 27.10

13.35 Distempering with oil bound washable distemper of approved brand and manufacture and of required shade on old work (one or more coats), to give an even shade as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12027	Oil bound washable distemper	Kg.	1.000	₹ 52.00	₹ 52.00
	b. Carriage:				
	Oil bound washable distemper	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.30	₹ 340.00	₹ 102.00
0212	Helper	Day	0.20	₹ 300.00	₹ 60.00
	d. Glue, putty, brushes etc: (LS)	10.00%	on	₹ 221.20	₹ 22.12
	e. Pumps for water, scaffolding etc: (LS)	2.00%	on	₹ 243.32	₹ 4.87
	f. Water charges: @ 1% on total.	1%	on	₹ 248.19	₹ 2.48
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 250.67	₹ 7.52
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 258.19	₹ 38.73
				Total	₹ 296.92
				Total cost for 1 sqm.	₹ 29.69
				Say,	₹ 29.70

13.36 Distempering with 1st quality acrylic washable distemper of approved brand and manufacture and of required shade on old work (one or more coats) to give an even shade as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12002	1st quality acrylic washable distemper	Kg.	1.000	₹ 45.00	₹ 45.00
	b. Carriage:				
	1st quality acrylic washable distemper	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0227	Painter	Day	0.20	₹ 340.00	₹ 68.00
0212	Helper	Day	0.15	₹ 300.00	₹ 45.00
	d. Glue, putty, brushes etc: (LS)	10.00%	on	₹ 162.20	₹ 16.22
	e. Pumps for water, scaffolding etc: (LS)	2.00%	on	₹ 178.42	₹ 3.57
	f. Water charges: @ 1% on total.	1%	on	₹ 181.99	₹ 1.82
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 183.81	₹ 5.51
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 189.32	₹ 28.40
				Total	₹ 217.72
				Total cost for 1 sqm.	₹ 21.77
				Say,	₹ 21.80

13.37 Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0212	Helper (skilled)	Day	0.12	₹ 300.00	₹ 36.00
0212	Helper	Day	0.06	₹ 300.00	₹ 18.00
0205	Waterman	Day	0.06	₹ 300.00	₹ 18.00
	b.Sand paper, wire brushes, CM etc: (LS)	5.00%	on	₹ 75.00	₹ 3.75
	c.Scaffolding, ladder etc: (LS)	8.00%	on	₹ 78.75	₹ 6.30
	d. Water charges: @ 1% on total.	1%	on	₹ 85.05	₹ 0.85
	e. Sundries & contingencies: @ 3% on total.	3%	on	₹ 85.90	₹ 2.58
	f. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 88.48	₹ 13.27
				Total	₹ 101.75
				Total cost for 1 Sqm.	₹ 10.18
				Say,	₹ 10.20

13.38 Finishing walls with water proofing cement paint of required shade of approved brand and manufacture on old work (one or more coats) including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12043	Water proofing cement paint	Kg.	2.300	₹ 44.00	₹ 101.20
	b. Carriage:				
	Water proofing cement paint	LS	1.50	₹ 1.20	₹ 1.80
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
0212	Helper	Day	0.25	₹ 300.00	₹ 75.00
0205	Waterman	Day	0.05	₹ 300.00	₹ 15.00
	d. Glue, putty, brushes etc: (LS)	5.00%	on	₹ 284.00	₹ 14.20
	e. Pumps for water, scaffolding etc: (LS)	5.00%	on	₹ 298.20	₹ 14.91
	f. Water charges: @ 1% on total.	1%	on	₹ 313.11	₹ 3.13
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 316.24	₹ 9.49
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 325.73	₹ 48.86

Total	₹	374.59
Total cost for 1 sqm.	₹	37.46
Say,	₹	37.50

13.39 Finishing walls with textured exterior paint of required shade of approved brand and manufacture on old work (one or more coats) including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12042	Textured exterior paint	Ltr.	1.800	₹ 245.00	₹ 441.00
	b. Carriage:				
	Textured exterior paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.30	₹ 340.00	₹ 102.00
0212	Helper	Day	0.25	₹ 300.00	₹ 75.00
0205	Waterman	Day	0.05	₹ 300.00	₹ 15.00
	d. Glue, putty, brushes etc: (LS)	2.00%	on	₹ 640.20	₹ 12.80
	e. Pumps for water, scaffolding etc: (LS)	5.00%	on	₹ 653.00	₹ 32.65
	f. Water charges: @ 1% on total.	1%	on	₹ 685.65	₹ 6.86
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 692.51	₹ 20.78
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 713.29	₹ 106.99
				Total	₹ 820.28
	Total cost for 1 sqm.				₹ 82.03
				Say,	₹ 82.00

13.40 Finishing walls with acrylic smooth exterior paint of required shade of approved brand and manufacture on old work (one or more coats) including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12004	Acrylic smooth exterior paint	Ltr.	0.900	₹ 185.00	₹ 166.50
	b. Carriage:				
	Acrylic smooth exterior paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.30	₹ 340.00	₹ 102.00
0212	Helper	Day	0.25	₹ 300.00	₹ 75.00
0205	Waterman	Day	0.10	₹ 300.00	₹ 30.00
	d. Glue, putty, brushes etc: (LS)	4.00%	on	₹ 380.70	₹ 15.23
	e. Pumps for water, scaffolding etc: (LS)	5.00%	on	₹ 395.93	₹ 19.80
	f. Water charges: @ 1% on total.	1%	on	₹ 415.73	₹ 4.16
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 419.89	₹ 12.60
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 432.49	₹ 64.87
				Total	₹ 497.36
	Total cost for 1 sqm.				₹ 49.74
				Say,	₹ 49.70

13.41 Finishing walls with premium acrylic smooth exterior paint of required shade of approved brand and manufacture on old work (one or more coats) including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12033	Premium acrylic smooth exterior paint	Ltr.	0.800	₹ 218.00	₹ 174.40
	b. Carriage:				
	Premium acrylic smooth exterior paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				

0224	Mate	Day	0.02	₹	300.00	₹	6.00
0227	Painter	Day	0.30	₹	340.00	₹	102.00
0212	Helper	Day	0.25	₹	300.00	₹	75.00
0205	Waterman	Day	0.10	₹	300.00	₹	30.00
	d. Glue, putty, brushes etc: (LS)	3.00%	on	₹	388.60	₹	11.66
	e. Pumps for water, scaffolding etc: (LS)	5.00%	on	₹	400.26	₹	20.01
	f. Water charges: @ 1% on total.	1%	on	₹	420.27	₹	4.20
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹	424.47	₹	12.73
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	437.20	₹	65.58
					Total	₹	502.78
				Total cost for 1 sqm.		₹	50.28
					Say,	₹	50.30

13.42 Painting one thin coat with white lead of approved brand and manufacture on wet or patchy portion of plastered surface on old work including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12045	White lead	Kg.	0.850	₹ 155.00	₹ 131.75
12026	Double boiled linseed oil.	Litre.	0.600	₹ 210.00	₹ 126.00
	b. Carriage:				
	White lead	LS	1.00	₹ 1.20	₹ 1.20
	Double boiled linseed oil.	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.30	₹ 340.00	₹ 102.00
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
	d. Glue, putty, brushes etc: (LS)	2.00%	on	₹ 458.15	₹ 9.16
	e. Pumps for water, scaffolding etc: (LS)	4.00%	on	₹ 467.31	₹ 18.69
	f. Water charges: @ 1% on total.	1%	on	₹ 486.00	₹ 4.86
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 490.86	₹ 14.73
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 505.59	₹ 75.84
				Total	₹ 581.43
				Total cost for 1 sqm.	₹ 58.14
				Say,	₹ 58.10

13.43 Finishing with epoxy paint (one or more coats) of approved brand and manufacture at all locations prepared and applied as per manufacturer's specification on old work including preparation of surface etc. as required complete as per direction of the Engineer in charge:-

13.43.1 On steel work.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12020	Epoxy paint	Ltr.	0.700	₹ 250.00	₹ 175.00
	b. Carriage:				
	Epoxy paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
	d. Sand paper, putty, brushes etc: (LS)	4.00%	on	₹ 394.20	₹ 15.77
	e. Pumps for water, scaffolding, ladder etc: (LS)	8.00%	on	₹ 409.97	₹ 32.80
	f. Water charges: @ 1% on total.	1%	on	₹ 442.77	₹ 4.43
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 447.20	₹ 13.42
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 460.62	₹ 69.09
				Total	₹ 529.71
				Total cost for 1 sqm.	₹ 52.97

Say, ₹ 53.00

13.43.2 On concrete work.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12020	Epoxy paint	Ltr.	0.700	₹ 250.00	₹ 175.00
	b. Carriage:				
	Epoxy paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00
	d. Sand paper, putty, brushes etc: (LS)	4.00%	on	₹ 409.20	₹ 16.37
	e. Pumps for water, scaffolding, ladder etc: (LS)	8.00%	on	₹ 425.57	₹ 34.05
	f. Water charges: @ 1% on total.	1%	on	₹ 459.62	₹ 4.60
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 464.22	₹ 13.93
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 478.15	₹ 71.72
				Total	₹ 549.87
			Total cost for 1 sqm.		₹ 54.99
				Say,	₹ 55.00

13.44 Painting on G.S. sheet with synthetic enamel paint (one or more coats) of approved brand and manufacture of required colour to give an even shade on old work including preparation of surface as required complete as per direction of the Engineer in charge:-

	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12041	Synthetic enamel paint	Ltr.	0.460	₹ 185.00	₹ 85.10
	b. Carriage:				
	Synthetic enamel paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00
	d. Sand paper, putty, brushes etc: (LS)	10.00%	on	₹ 319.30	₹ 31.93
	e. Pumps for water, scaffolding, ladder etc: (LS)	2.00%	on	₹ 351.23	₹ 7.02
	f. Water charges: @ 1% on total.	1%	on	₹ 358.25	₹ 3.58
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 361.83	₹ 10.85
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 372.68	₹ 55.90
				Total	₹ 428.58
			Total cost for 1 sqm.		₹ 42.86
				Say,	₹ 42.90

13.45 Painting on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint (one or more coats) of approved brand and manufacture to give an even shade on old work including preparation of surface as required complete as per direction of the Engineer in charge:-

13.45.1 50 mm dia.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30.00 Mtr.	Mtr.			
	a. Materials:				
12008	Anti corrosive bitumestic paint	Ltr.	0.300	₹ 115.00	₹ 34.50
	b. Carriage:				
	Anti corrosive bitumestic paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00

d. Sand paper, putty, brushes, wire brushes, extra painting on fittings etc: (LS)	10.00%	on	₹	268.70	₹	26.87
e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹	295.57	₹	14.78
f. Water charges: @ 1% on total.	1%	on	₹	310.35	₹	3.10
g. Sundries & contingencies: @ 3% on total.	3%	on	₹	313.45	₹	9.40
h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	322.85	₹	48.43
				Total	₹	371.28
	Total cost for 1 Mtr.				₹	12.38
				Say,	₹	12.40

13.45.2 75 mm dia.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30.00 Mtr.	Mtr.			
	a. Materials:				
12008	Anti corrosive bitumestic paint	Ltr.	0.450	₹ 115.00	₹ 51.75
	b. Carriage:				
	Anti corrosive bitumestic paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0227	Painter	Day	0.48	₹ 340.00	₹ 163.20
0212	Helper	Day	0.48	₹ 300.00	₹ 144.00
	d. Sand paper, putty, brushes, wire brushes, extra painting on fittings etc: (LS)	10.00%	on	₹ 372.15	₹ 37.22
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹ 409.37	₹ 20.47
	f. Water charges: @ 1% on total.	1%	on	₹ 429.84	₹ 4.30
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 434.14	₹ 13.02
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 447.16	₹ 67.07
				Total	₹ 514.23
	Total cost for 1 Mtr.				₹ 17.14
				Say,	₹ 17.10

13.45.3 100 mm dia.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30.00 Mtr.	Mtr.			
	a. Materials:				
12008	Anti corrosive bitumestic paint	Ltr.	0.560	₹ 115.00	₹ 64.40
	b. Carriage:				
	Anti corrosive bitumestic paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
0227	Painter	Day	0.65	₹ 340.00	₹ 221.00
0212	Helper	Day	0.65	₹ 300.00	₹ 195.00
	d. Sand paper, putty, brushes, wire brushes, extra painting on fittings etc: (LS)	10.00%	on	₹ 496.60	₹ 49.66
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹ 546.26	₹ 27.31
	f. Water charges: @ 1% on total.	1%	on	₹ 573.57	₹ 5.74
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 579.31	₹ 17.38
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 596.69	₹ 89.50
				Total	₹ 686.19
	Total cost for 1 Mtr.				₹ 22.87
				Say,	₹ 22.90

13.45.4 150 mm dia.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30.00 Mtr.	Mtr.			
	a. Materials:				
12008	Anti corrosive bitumestic paint	Ltr.	0.850	₹ 115.00	₹ 97.75
	b. Carriage:				
	Anti corrosive bitumestic paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0227	Painter	Day	1.00	₹ 340.00	₹ 340.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
	d. Sand paper, putty, brushes, wire brushes, extra painting on fittings etc: (LS)	10.00%	on	₹ 762.95	₹ 76.30
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹ 839.25	₹ 41.96
	f. Water charges: @ 1% on total.	1%	on	₹ 881.21	₹ 8.81
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 890.02	₹ 26.70
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 916.72	₹ 137.51
				Total	₹ 1,054.23
				Total cost for 1 Mtr.	₹ 35.14
				Say,	₹ 35.10

13.46 Painting on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint (one or more coats) of required colour of approved brand and manufacture to give an even shade on old work over and including preparation of surface as required complete as per direction of the Engineer in charge:-

13.46.1 50 mm dia.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30.00 Mtr.	Mtr.			
	a. Materials:				
12041	Synthetic enamel paint	Ltr.	0.240	₹ 185.00	₹ 44.40
	b. Carriage:				
	Synthetic enamel paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00
	d. Sand paper, putty, brushes, wire brushes, extra painting on fittings etc: (LS)	10.00%	on	₹ 278.60	₹ 27.86
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹ 306.46	₹ 15.32
	f. Water charges: @ 1% on total.	1%	on	₹ 321.78	₹ 3.22
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 325.00	₹ 9.75
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 334.75	₹ 50.21
				Total	₹ 384.96
				Total cost for 1 Mtr.	₹ 12.83
				Say,	₹ 12.80

13.46.2 75 mm dia.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30.00 Mtr.	Mtr.			
	a. Materials:				
12041	Synthetic enamel paint	Ltr.	0.350	₹ 185.00	₹ 64.75
	b. Carriage:				
	Synthetic enamel paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0227	Painter	Day	0.48	₹ 340.00	₹ 163.20
0212	Helper	Day	0.48	₹ 300.00	₹ 144.00

d. Sand paper, putty, brushes, wire brushes, extra painting on fittings etc: (LS)	10.00%	on	₹	385.15	₹	38.52
e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹	423.67	₹	21.18
f. Water charges: @ 1% on total.	1%	on	₹	444.85	₹	4.45
g. Sundries & contingencies: @ 3% on total.	3%	on	₹	449.30	₹	13.48
h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	462.78	₹	69.42
				Total	₹	532.20
				Total cost for 1 Mtr.	₹	17.74
				Say,	₹	17.70

13.46.3 100 mm dia.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30.00 Mtr.	Mtr.			
	a. Materials:				
12041	Synthetic enamel paint	Ltr.	0.460	₹ 185.00	₹ 85.10
	b. Carriage:				
	Synthetic enamel paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
0227	Painter	Day	0.65	₹ 340.00	₹ 221.00
0212	Helper	Day	0.65	₹ 300.00	₹ 195.00
	d. Sand paper, putty, brushes, wire brushes, extra painting on fittings etc: (LS)	10.00%	on	₹ 517.30	₹ 51.73
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹ 569.03	₹ 28.45
	f. Water charges: @ 1% on total.	1%	on	₹ 597.48	₹ 5.97
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 603.45	₹ 18.10
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 621.55	₹ 93.23
				Total	₹ 714.78
				Total cost for 1 Mtr.	₹ 23.83
				Say,	₹ 23.80

13.46.4 150 mm dia.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30.00 Mtr.	Mtr.			
	a. Materials:				
12041	Synthetic enamel paint	Ltr.	0.460	₹ 185.00	₹ 85.10
	b. Carriage:				
	Synthetic enamel paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0227	Painter	Day	1.00	₹ 340.00	₹ 340.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
	d. Sand paper, putty, brushes, wire brushes, extra painting on fittings etc: (LS)	10.00%	on	₹ 750.30	₹ 75.03
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹ 825.33	₹ 41.27
	f. Water charges: @ 1% on total.	1%	on	₹ 866.60	₹ 8.67
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 875.27	₹ 26.26
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 901.53	₹ 135.23
				Total	₹ 1,036.76
				Total cost for 1 Mtr.	₹ 34.56
				Say,	₹ 34.60

13.47 Painting on wood work with oil type wood preservative (one or more coats) of approved brand and manufacture on old work including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 10.00 Sqm.	Sqm.				
	a. Materials:					
12028	Oil type wood preservative	Ltr.	0.600	₹ 155.00	₹	93.00
	b. Carriage:					
0	Oil type wood preservative	LS	1.00	₹ 1.20	₹	1.20
	c. Labours:					
0224	Mate	Day	0.02	₹ 300.00	₹	6.00
0227	Painter	Day	0.20	₹ 340.00	₹	68.00
0212	Helper	Day	0.20	₹ 300.00	₹	60.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	5.00%	on	₹ 228.20	₹	11.41
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹ 239.61	₹	11.98
	f. Water charges: @ 1% on total.	1%	on	₹ 251.59	₹	2.52
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 254.11	₹	7.62
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 261.73	₹	39.26
				Total	₹	300.99
				Total cost for 1 sqm.	₹	30.10
				Say,	₹	30.10

13.48 Providing and applying fire retardant paint unthinned on cleaned wood / ply surface (one or more coats) of required colour of approved brand and manufacture on old work including preparation of surface as per recommendation of the manufacturer to make the surface fire retardant and as required complete as per direction of the Engineer in charge:-

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12021	Fire retardant paint	Ltr.	3.000	₹ 290.00	₹ 870.00
	b. Carriage:				
0	Fire retardant paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
0227	Painter	Day	0.60	₹ 340.00	₹ 204.00
0212	Helper	Day	0.60	₹ 300.00	₹ 180.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	2.00%	on	₹ 1,270.20	₹ 25.40
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.00%	on	₹ 1,295.60	₹ 64.78
	f. Water charges: @ 1% on total.	1%	on	₹ 1,360.38	₹ 13.60
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,373.98	₹ 41.22
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,415.20	₹ 212.28
				Total	₹ 1,627.48
				Total cost for 1 sqm.	₹ 162.75
				Say,	₹ 162.80

13.49 Coal tarring (one or more coats) of approved brand and manufacture on old work @ 0.16 litre coal tar per sqm including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12011	Coal tar.	Ltr.	1.600	₹ 35.00	₹ 56.00
02004	Kerosine oil.	Ltr.	0.300	₹ 20.00	₹ 6.00
	b. Carriage:				
	Coal tar.	LS	1.00	₹ 1.20	₹ 1.20
	Kerosine oil.	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.05	₹ 340.00	₹ 17.00
0212	Helper	Day	0.50	₹ 300.00	₹ 150.00

d. Sand paper, putty, brushes, wire brushes etc: (LS)	5.00%	on	₹	237.40	₹	11.87
e. Pumps for water, scaffolding, ladder etc: (LS)	3.00%	on	₹	249.27	₹	7.48
f. Water charges: @ 1% on total.	1%	on	₹	256.75	₹	2.57
g. Sundries & contingencies: @ 3% on total.	3%	on	₹	259.32	₹	7.78
h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	267.10	₹	40.07
				Total	₹	307.17
				Total cost for 1 sqm.	₹	30.72
				Say,	₹	30.70

13.50 Wall painting with plastic emulsion paint (one or more coats) of required colour of approved brand and manufacture on old work to give an even shade including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12032	Plastic emulsion paint	Ltr.	0.750	₹ 220.00	₹ 165.00
	b. Carriage:				
	Plastic emulsion paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0227	Painter	Day	0.55	₹ 340.00	₹ 187.00
0212	Helper	Day	0.40	₹ 300.00	₹ 120.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	4.0%	on	₹ 485.20	₹ 19.41
	e. Pumps for water, scaffolding, ladder etc: (LS)	3.0%	on	₹ 504.61	₹ 15.14
	f. Water charges: @ 1% on total.	1%	on	₹ 519.75	₹ 5.20
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 524.95	₹ 15.75
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 540.70	₹ 81.11
				Total	₹ 621.81
				Total cost for 1 sqm.	₹ 62.18
				Say,	₹ 62.20

13.51 Painting with enamel paint (one or more coats) of required colour of approved brand and manufacture on old work to give an even shade including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12041	Enamel paint	Ltr.	0.610	₹ 185.00	₹ 112.85
	b. Carriage:				
	Enamel paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	4.0%	on	₹ 347.05	₹ 13.88
	e. Pumps for water, scaffolding, ladder etc: (LS)	4.0%	on	₹ 360.93	₹ 14.44
	f. Water charges: @ 1% on total.	1%	on	₹ 375.37	₹ 3.75
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 379.12	₹ 11.37
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 390.49	₹ 58.57
				Total	₹ 449.06
				Total cost for 1 sqm.	₹ 44.91
				Say,	₹ 44.90

13.52 Painting with synthetic enamel paint (one or more coats) of required colour of approved brand and manufacture on old work to give an even shade including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12041	Synthetic enamel paint	Ltr.	0.700	₹ 185.00	₹ 129.50
	b. Carriage:				
	Enamel paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	4.0%	on	₹ 363.70	₹ 14.55
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.0%	on	₹ 378.25	₹ 18.91
	f. Water charges: @ 1% on total.	1%	on	₹ 397.16	₹ 3.97
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 401.13	₹ 12.03
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 413.16	₹ 61.97
				Total	₹ 475.13
			Total cost for 1 sqm.		₹ 47.51
				Say,	₹ 47.50

13.53 Painting with Aluminium paint (one or more coats) of approved brand and manufacture on old work to give an even shade including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12005	Aluminium paint	Ltr.	0.460	₹ 142.00	₹ 65.32
	b. Carriage:				
	Aluminium paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	4.0%	on	₹ 299.52	₹ 11.98
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.0%	on	₹ 311.50	₹ 15.58
	f. Water charges: @ 1% on total.	1%	on	₹ 327.08	₹ 3.27
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 330.35	₹ 9.91
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 340.26	₹ 51.04
				Total	₹ 391.30
			Total cost for 1 sqm.		₹ 39.13
				Say,	₹ 39.10

13.54 Painting with acid proof paint (one or more coats) of approved brand and manufacture of required colour on old work to give an even shade including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12003	Acid proof paint	Ltr.	0.700	₹ 230.00	₹ 161.00
	b. Carriage:				
	Acid proof paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00

d. Sand paper, putty, brushes, wire brushes etc: (LS)	5.0%	on	₹	395.20	₹	19.76
e. Pumps for water, scaffolding, ladder etc: (LS)	4.0%	on	₹	414.96	₹	16.60
f. Water charges: @ 1% on total.	1%	on	₹	431.56	₹	4.32
g. Sundries & contingencies: @ 3% on total.	3%	on	₹	435.88	₹	13.08
h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	448.96	₹	67.34
				Total	₹	516.30
				Total cost for 1 sqm.	₹	51.63
				Say,	₹	51.60

13.55 Painting with black anticorrosive bitumastic paint (one or more coats) of approved brand and manufacture on old work to give an even shade including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12008	Anti corrosive bitumestic paint	Ltr.	0.570	₹ 115.00	₹ 65.55
	b. Carriage:				
	Anti corrosive bitumestic paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.35	₹ 340.00	₹ 119.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	6.0%	on	₹ 299.75	₹ 17.99
	e. Pumps for water, scaffolding, ladder etc: (LS)	4.0%	on	₹ 317.74	₹ 12.71
	f. Water charges: @ 1% on total.	1%	on	₹ 330.45	₹ 3.30
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 333.75	₹ 10.01
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 343.76	₹ 51.56
				Total	₹ 395.32
				Total cost for 1 sqm.	₹ 39.53
				Say,	₹ 39.50

13.56 Floor painting with floor enamel paint (one or more coats) of approved brand and manufacture of required colour on old work to give an even shade including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12022	Floor enamel paint	Ltr.	0.910	₹ 130.00	₹ 118.30
	b. Carriage:				
	Floor enamel paint	LS	1.50	₹ 1.20	₹ 1.80
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.30	₹ 340.00	₹ 102.00
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	5.0%	on	₹ 318.10	₹ 15.91
	e. Pumps for water, scaffolding, ladder etc: (LS)	4.0%	on	₹ 334.01	₹ 13.36
	f. Water charges: @ 1% on total.	1%	on	₹ 347.37	₹ 3.47
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 350.84	₹ 10.53
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 361.37	₹ 54.21
				Total	₹ 415.58
				Total cost for 1 sqm.	₹ 41.56
				Say,	₹ 41.60

13.57 Varnishing with varnish (one or more coats of glue sizing) of approved brand and manufacture on old work including preparation of surface as required complete as per direction of the Engineer in charge:-

13.57.1 With copal varnish.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12038	Copal varnish (superior)	Ltr.	0.700	₹ 145.00	₹ 101.50
12023	Glue for sizing	Kg.	0.035	₹ 135.00	₹ 4.73
	b. Carriage:				
	Copal varnish	LS	1.00	₹ 1.20	₹ 1.20
	Glue for sizing	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0227	Painter	Day	0.50	₹ 340.00	₹ 170.00
0212	Helper	Day	0.50	₹ 300.00	₹ 150.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	5.00%	on	₹ 440.63	₹ 22.03
	e. Pumps for water, scaffolding, ladder etc: (LS)	1.00%	on	₹ 462.66	₹ 4.63
	f. Water charges: @ 1% on total.	1%	on	₹ 467.29	₹ 4.67
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 471.96	₹ 14.16
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 486.12	₹ 72.92
				Total	₹ 559.04
			Total cost for 1 sqm.		₹ 55.90
				Say,	₹ 55.90

13.57.2 With spar varnish.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12039	Spar varnish (superior)	Ltr.	0.700	₹ 145.00	₹ 101.50
12023	Glue for sizing	Kg.	0.035	₹ 135.00	₹ 4.73
	b. Carriage:				
	Spar varnish	LS	1.00	₹ 1.20	₹ 1.20
	Glue for sizing	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0227	Painter	Day	0.50	₹ 340.00	₹ 170.00
0212	Helper	Day	0.50	₹ 300.00	₹ 150.00
	d. Sand paper, putty, brushes, wire brushes etc: (LS)	5.0%	on	₹ 440.63	₹ 22.03
	e. Pumps for water, scaffolding, ladder etc: (LS)	0.50%	on	₹ 462.66	₹ 2.31
	f. Water charges: @ 1% on total.	1%	on	₹ 464.97	₹ 4.65
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 469.62	₹ 14.09
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 483.71	₹ 72.56
				Total	₹ 556.27
			Total cost for 1 sqm.		₹ 55.63
				Say,	₹ 55.60

13.58 French spirit polishing (one or more coats of glue sizing) on old work including preparation of surface clean, dirt and dust free, sand papered smooth as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12047	Wood filler (Shelac)	Kg.	0.132	₹ 330.00	₹ 43.56
12036	Spirit	Ltr.	1.000	₹ 72.00	₹ 72.00
	b. Carriage:				

	Wood filler (Shelac)	LS	1.00	₹	1.20	₹	1.20
	Spirit	LS	1.50	₹	1.20	₹	1.80
	c. Labours:						
0224	Mate	Day	0.08	₹	300.00	₹	24.00
0227	Painter	Day	1.00	₹	340.00	₹	340.00
0212	Helper	Day	1.00	₹	300.00	₹	300.00
	d. Pigment, turpentine oil, white woolen cloth, linseed oil, cotton, sand paper, putty, brushes, wire brushes etc: (LS)	2.0%	on	₹	782.56	₹	15.65
	e. Pumps for water, scaffolding, ladder etc: (LS)	0.50%	on	₹	798.21	₹	3.99
	f. Water charges: @ 1% on total.	1%	on	₹	802.20	₹	8.02
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹	810.22	₹	24.31
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	834.53	₹	125.18
					Total	₹	959.71
					Total cost for 1 sqm.	₹	95.97
					Say,	₹	96.00

13.59 Polishing on wood work with readymade wax polish (two or more coats) of approved brand and manufacture on old work including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12044	Wax polish (ready made)	Kg.	0.250	₹ 265.00	₹ 66.25
	b. Carriage:				
	Wax polish	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.40	₹ 340.00	₹ 136.00
0212	Helper	Day	0.40	₹ 300.00	₹ 120.00
	d. Sand paper, putty, brushes, wire brushes, soap, cloth etc: (LS)	3.0%	on	₹ 332.45	₹ 9.97
	e. Pumps for water, scaffolding, ladder etc: (LS)	2.0%	on	₹ 342.42	₹ 6.85
	f. Water charges: @ 1% on total.	1%	on	₹ 349.27	₹ 3.49
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 352.76	₹ 10.58
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 363.34	₹ 54.50
				Total	₹ 417.84
				Total cost for 1 sqm.	₹ 41.78
				Say,	₹ 41.80

13.60 Floor polishing on masonry / concrete floors with readymade wax polish (two or more coats) of approved brand and manufacture on old work including preparation of surface as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12044	Wax polish (ready made)	Kg.	0.050	₹ 265.00	₹ 13.25
	b. Carriage:				
	Wax polish	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.02	₹ 300.00	₹ 6.00
0227	Painter	Day	0.20	₹ 340.00	₹ 68.00
0212	Helper	Day	0.20	₹ 300.00	₹ 60.00
	d. Sand paper, putty, brushes, wire brushes, soap, cloth etc: (LS)	5.0%	on	₹ 148.45	₹ 7.42
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.0%	on	₹ 155.87	₹ 7.79
	f. Water charges: @ 1% on total.	1%	on	₹ 163.66	₹ 1.64

g. Sundries & contingencies: @ 3% on total.	3%	on	₹	165.30	₹	4.96
h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹	170.26	₹	25.54
				Total	₹	195.80
				Total cost for 1 sqm.	₹	19.58
				Say,	₹	19.60

13.61 Re-Lettering with black japan paint of approved brand and manufacture on old work as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 letters 15 Cm height.	Letter per Cm height			
	a. Materials:				
12009	Black japan paint	Ltr.	0.350	₹ 110.00	₹ 38.50
	b. Carriage:				
	Black japan paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.17	₹ 300.00	₹ 51.00
0227	Painter	Day	2.10	₹ 340.00	₹ 714.00
0212	Helper	Day	2.10	₹ 300.00	₹ 630.00
	d. Acetic acid, soap, cloth, Sand paper, putty, brushes, wire brushes etc: (LS)	5.0%	on	₹ 1,434.70	₹ 71.74
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.0%	on	₹ 1,506.44	₹ 75.32
	f. Water charges: @ 1% on total.	1%	on	₹ 1,581.76	₹ 15.82
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 1,597.58	₹ 47.93
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 1,645.51	₹ 246.83
				Total	₹ 1,892.34
				Total cost for 1 letter per Cm height	₹ 1.26
				Say,	₹ 1.30

13.62 Painting (one or more coat) with black japan paint of approved brand and manufacture on old work to give an even shade as required complete as per direction of the Engineer in charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Materials:				
12009	Black japan paint	Ltr.	0.700	₹ 110.00	₹ 77.00
	b. Carriage:				
0	Black japan paint	LS	1.00	₹ 1.20	₹ 1.20
	c. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0227	Painter	Day	0.32	₹ 340.00	₹ 108.80
0212	Helper	Day	0.32	₹ 300.00	₹ 96.00
	d. Acetic acid, soap, cloth, Sand paper, putty, brushes, wire brushes etc: (LS)	5.0%	on	₹ 292.00	₹ 14.60
	e. Pumps for water, scaffolding, ladder etc: (LS)	5.0%	on	₹ 306.60	₹ 15.33
	f. Water charges: @ 1% on total.	1%	on	₹ 321.93	₹ 3.22
	g. Sundries & contingencies: @ 3% on total.	3%	on	₹ 325.15	₹ 9.75
	h. Contractor's profit & overheads: @ 15% on total.	15%	on	₹ 334.90	₹ 50.24
				Total	₹ 385.14
				Total cost for 1 Sqm.	₹ 38.51
				Say,	₹ 38.50

S U B - H E A D - 1 4



D I S M A N T L I N G
A N D
D E M O L I S H I N G

SUB HEAD : 14.0 / DISMANTLING AND DEMOLISHING WORK
BASIC RATES

Code No.	Description	Unit	Rate
0210	Carpenter 2nd class	Day	₹ 380.00
0203	Beldar	Day	₹ 300.00
0212	Coolie	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0224	Mate	Day	₹ 300.00
0212	Helper	Day	₹ 300.00
0205	Waterman	Day	₹ 300.00
0211	Watchman	Day	₹ 300.00
0212	Khalashi	Day	₹ 300.00
0207	Blacksmith 2nd class	Day	₹ 380.00
02004	Kerosene oil	Day	₹ 48.00

SUB HEAD : 14.0
DISMANTLING AND DEMOLISHING WORK

- 1 Specifications of dismantling and demolishing of different elements of structures and safety measures will be as per CPWD's specification.
- 2 For dismantling of structures, which remain submerged in water, the cost may be enhanced by 50%. If site condition warrant lowering of water level to facilitate dismantling, the cost may be enhanced by additional 25%.
- 3 Dismantling of utilities like water supply lines, electric and telephone lines is required to be done under the supervision of concerned departments with prior information to the users.
- 4 The dismantled materials should be examined and a realistic assessment and provision should be made after due process for the salvage value for such materials, can be utilised for works or auctioned.

14.1 Demolishing lime concrete manually / by mechanical means including disposal of material with all lifts and upto 50 m lead etc. complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.03	₹ 300.00	₹ 9.00
0203	Belder	Day	0.38	₹ 300.00	₹ 114.00
0212	Coolie	Day	0.38	₹ 300.00	₹ 114.00
	b.Chiesel, sharpening tools, sledge hammers, scaffolding etc. (LS)	3.0%	on	₹ 237.00	₹ 7.11
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 244.11	₹ 2.44
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 246.55	₹ 7.40
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 253.95	₹ 38.09
		Total cost for 1 Cum.		Total	₹ 292.04
				Say,	₹ 292.00

14.2 Demolishing cement concrete manually / by mechanical means including disposal of material with all lifts and upto 50 m lead etc. complete as per direction of the Engineer- in-charge:-

14.2.1 Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0203	Belder	Day	1.59	₹ 300.00	₹ 477.00
0212	Coolie	Day	0.72	₹ 300.00	₹ 216.00
	b.Chiesel, sharpening tools, sledge hammers, scaffolding etc. (LS)	4.0%	on	₹ 723.00	₹ 28.92
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 751.92	₹ 7.52
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 759.44	₹ 22.78
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 782.22	₹ 117.33
		Total cost for 1 Cum.		Total	₹ 899.55
				Say,	₹ 899.60

14.2.2 Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0203	Belder	Day	0.88	₹ 300.00	₹ 264.00
0212	Coolie	Day	0.55	₹ 300.00	₹ 165.00
	b.Chiesel, sharpening tools, sledge hammers, scaffolding etc. (LS)	4.0%	on	₹ 459.00	₹ 18.36

	c. Water charges : @ 1.00% on total	1.0%	on	₹ 477.36	₹ 4.77
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 482.13	₹ 14.46
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 496.59	₹ 74.49
		Total cost for 1 Cum.		Total	₹ 571.08
				Say,	₹ 571.10

14.3 Demolishing reinforced cement concrete manually / by mechanical means including stacking of steel bars properly and disposal of **unserviceable material with all lifts and upto 50 m lead etc. complete as per direction of the Engineer- in-charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0203	Belder	Day	2.65	₹ 300.00	₹ 795.00
0212	Coolie	Day	0.72	₹ 300.00	₹ 216.00
0211	Watchman	Day	0.05	₹ 300.00	₹ 15.00
	b.Chiesel, sharpening tools, sledge hammers, scaffolding etc. (LS)	3.5%	on	₹ 1,056.00	₹ 36.96
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 1,092.96	₹ 10.93
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 1,103.89	₹ 33.12
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 1,137.01	₹ 170.55
		Total cost for 1 Cum.		Total	₹ 1,307.56
				Say,	₹ 1,307.60

14.4 Demolishing reinforced brick work manually / by mechanical means including stacking of steel bars, bricks/ brick slump properly and disposal of **unserviceable material with all lifts and upto 50 m lead etc. complete as per direction of the Engineer- in-charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.05	₹ 300.00	₹ 15.00
0203	Belder	Day	2.12	₹ 300.00	₹ 636.00
0212	Coolie	Day	0.90	₹ 300.00	₹ 270.00
0211	Watchman	Day	0.05	₹ 300.00	₹ 15.00
	b.Chiesel, sharpening tools, sledge hammers, scaffolding etc. (LS)	1.0%	on	₹ 936.00	₹ 9.36
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 945.36	₹ 9.45
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 954.81	₹ 28.64
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 983.45	₹ 147.52
		Total cost for 1 Cum.		Total	₹ 1,130.97
				Say,	₹ 1,131.00

14.5 Extra for cutting reinforcement in RCC or R.B. work manually / by mechanical means (payment to made on the cross sectional area of RCC or R.B. work) etc. complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 0.50 Sqm.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.010	₹ 300.00	₹ 3.00
0215	Fitter	Day	0.250	₹ 380.00	₹ 95.00
0212	Helper	Day	0.250	₹ 300.00	₹ 75.00
	b.Chiesel, sharpening tools, hacksaw or gas cutters/ concrete cutters, etc. (LS)	14.0%	on	₹ 173.00	₹ 24.22
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 197.22	₹ 1.97
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 199.19	₹ 5.98
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 205.17	₹ 30.78
				Total	₹ 235.95

		Total cost for 1 Sqm.		₹ 471.90
			Say,	₹ 471.90

14.6 Extra for scrapping, cleaning and straightening reinforcement obtained from RCC or R.B. work etc. complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 237 Kg.	Kg.			
	a. Labours:				
0224	Mate	Day	0.060	₹ 300.00	₹ 18.00
0215	Fitter	Day	0.750	₹ 380.00	₹ 285.00
0212	Helper	Day	0.750	₹ 300.00	₹ 225.00
	b. Sledge hammers, rail, etc. (LS)	4.0%	on	₹ 528.00	₹ 21.12
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 549.12	₹ 5.49
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 554.61	₹ 16.64
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 571.25	₹ 85.69
				Total	₹ 656.94
		Total cost for 1 Kg.			₹ 2.77
				Say,	₹ 2.80

14.7 Demolishing brick work including stacking of serviceable materials and disposal of unserviceable materials with all lifts and upto a lead of 50m etc. complete as per direction of the Engineer- in-charge:-

14.7.1 In mud mortar.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.030	₹ 300.00	₹ 9.00
0203	Belder	Day	0.250	₹ 300.00	₹ 75.00
0212	Coolie	Day	0.300	₹ 300.00	₹ 90.00
0211	Watchman	Day	0.100	₹ 300.00	₹ 30.00
	b. Chiesel, sharpening tools, sledge hammers, scaffolding etc. (LS)	4.0%	on	₹ 204.00	₹ 8.16
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 212.16	₹ 2.12
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 214.28	₹ 6.43
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 220.71	₹ 33.11
		Total cost for 1 Cum.		Total	₹ 253.82
				Say,	₹ 253.80

14.7.2 In lime mortar.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.030	₹ 300.00	₹ 9.00
0203	Belder	Day	0.370	₹ 300.00	₹ 111.00
0212	Coolie	Day	0.300	₹ 300.00	₹ 90.00
0211	Watchman	Day	0.100	₹ 300.00	₹ 30.00
	b. Chiesel, sharpening tools, sledge hammers, scaffolding etc. (LS)	4.0%	on	₹ 240.00	₹ 9.60
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 249.60	₹ 2.50
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 252.10	₹ 7.56
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 259.66	₹ 38.95
		Total cost for 1 Cum.		Total	₹ 298.61
				Say,	₹ 298.60

14.7.3 In cement mortar.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Sqm.			

	a. Labours:				
0224	Mate	Day	0.060	₹ 300.00	₹ 18.00
0203	Belder	Day	0.950	₹ 300.00	₹ 285.00
0212	Coolie	Day	0.850	₹ 300.00	₹ 255.00
0211	Watchman	Day	0.100	₹ 300.00	₹ 30.00
	b.Chiesel, sharpening tools, sledge hammers, scaffolding etc. (LS)	2.0%	on	₹ 588.00	₹ 11.76
	c. Water charges : @ 1.00% on total	1%	on	₹ 599.76	₹ 6.00
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 605.76	₹ 18.17
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 623.93	₹ 93.59
		Total cost for 1 Cum.		Total	₹ 717.52
				Say,	₹ 717.50

14.8 Removing mortar from brick and cleaning bricks including stacking bricks and disposal rubbish with all lifts and upto a lead of 50 m etc. complete as per direction of the Engineer- in-charge:-

14.8.1 In mud mortar.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1000 Nos.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.17	₹ 300.00	₹ 51.00
0203	Belder	Day	2.30	₹ 300.00	₹ 690.00
0212	Coolie	Day	1.30	₹ 300.00	₹ 390.00
0211	Watchman	Day	0.10	₹ 300.00	₹ 30.00
0220	Mason 2nd class	Day	0.35	₹ 380.00	₹ 133.00
	b.Chiesel, sharpening tools, sledge hammers, etc. (LS)	4.0%	on	₹ 1,294.00	₹ 51.76
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 1,345.76	₹ 13.46
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 1,359.22	₹ 40.78
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 1,400.00	₹ 210.00
				Total	₹ 1,610.00
		Total cost for Each.			₹ 1.61
				Say,	₹ 1.60

14.8.2 In lime mortar.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1000 Nos.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.19	₹ 300.00	₹ 57.00
0203	Belder	Day	2.50	₹ 300.00	₹ 750.00
0212	Coolie	Day	1.50	₹ 300.00	₹ 450.00
0211	Watchman	Day	0.10	₹ 300.00	₹ 30.00
0220	Mason 2nd class	Day	0.70	₹ 380.00	₹ 266.00
	b.Chiesel, sharpening tools, sledge hammers, etc. (LS)	4%	on	₹ 1,553.00	₹ 62.12
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 1,615.12	₹ 16.15
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 1,631.27	₹ 48.94
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 1,680.21	₹ 252.03
				Total	₹ 1,932.24
		Total cost for Each.			₹ 1.93
				Say,	₹ 1.90

14.8.3 In cement mortar.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1000 Nos.	Sqm.			
	a. Labours:				

0224	Mate	Day	0.21	₹ 300.00	₹ 63.00
0203	Belder	Day	3.40	₹ 300.00	₹ 1,020.00
0212	Coolie	Day	1.35	₹ 300.00	₹ 405.00
0211	Watchman	Day	0.10	₹ 300.00	₹ 30.00
0220	Mason 2nd class	Day	1.10	₹ 380.00	₹ 418.00
	b.Chiesel, sharpening tools, sledge hammers, etc. (LS)	3.00%	on	₹ 1,936.00	₹ 58.08
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 1,994.08	₹ 19.94
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 2,014.02	₹ 60.42
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 2,074.44	₹ 311.17
				Total	₹ 2,385.61
		Total cost for Each.			₹ 2.39
				Say,	₹ 2.40

14.9 Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :

14.9.1 Of area 3 sqm and below.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			
	a. Labours:				
0220	Mason (brick layer) 2nd class	Day	0.100	₹ 380.00	₹ 38.00
0203	Belder	Day	0.180	₹ 300.00	₹ 54.00
0207	Blacksmith 2nd class	Day	0.050	₹ 380.00	₹ 19.00
	b.Chiesel, sharpening tools, sledge hammers, ropes, scaffolding etc. (LS)	2.00%	on	₹ 111.00	₹ 2.22
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 113.22	₹ 1.13
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 114.35	₹ 3.43
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 117.78	₹ 17.67
		Total cost for Each.			₹ 135.45
				Say,	₹ 135.50

14.9.2 Of area beyond 3 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			
	a. Labours:				
0220	Mason (brick layer) 2nd class	Day	0.130	₹ 380.00	₹ 49.40
0203	Belder	Day	0.250	₹ 300.00	₹ 75.00
0211	Blacksmith 2nd class	Day	0.070	₹ 380.00	₹ 26.60
	b.Chiesel, sharpening tools, sledge hammers, ropes, scaffolding etc. (LS)	4.00%	on	₹ 151.00	₹ 6.04
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 157.04	₹ 1.57
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 158.61	₹ 4.76
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 163.37	₹ 24.51
		Total cost for Each.			₹ 187.88
				Say,	₹ 187.90

14.10 Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :

14.10.1 Of area 3 sqm and below.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			

	a. Labours:				
0210	Carpenter 2nd class	Day	0.050	₹ 380.00	₹ 19.00
0203	Belder	Day	0.060	₹ 300.00	₹ 18.00
0211	Watchman	Day	0.010	₹ 300.00	₹ 3.00
	b. Chiesel, sharpening tools, sledge hammers, ropes, scaffolding etc. (LS)	1.0%	on	₹ 40.00	₹ 0.40
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 40.40	₹ 0.40
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 40.80	₹ 1.22
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 42.02	₹ 6.30
		Total cost for Each.			₹ 48.32
				Say,	₹ 48.30

14.10.2 Of area beyond 3 sqm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	Each			
	a. Labours:				
0210	Carpenter 2nd class	Day	0.070	₹ 380.00	₹ 26.60
0203	Belder	Day	0.100	₹ 300.00	₹ 30.00
0211	Watchman	Day	0.010	₹ 300.00	₹ 3.00
	b. Chiesel, sharpening tools, sledge hammers, ropes, scaffolding etc. (LS)	1.0%	on	₹ 59.60	₹ 0.60
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 60.20	₹ 0.60
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 60.80	₹ 1.82
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 62.62	₹ 9.39
		Total cost for Each.			₹ 72.01
				Say,	₹ 72.00

14.11 Dismantling wood work in frames, trusses, purlins and rafters up to 10 metres span and 5 metres height including stacking the material within 50 metres lead :

14.11.1 Of sectional area 40 sq cm and below.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Mtr.	Mtr.			
	a. Labours:				
0210	Carpenter (2nd class)	Day	0.080	₹ 380.00	₹ 30.40
0203	Belder	Day	0.080	₹ 300.00	₹ 24.00
	b. Chiesel, sharpening tools, sledge hammers, ropes, scaffolding/ ladder etc. (LS)	1.0%	on	₹ 54.40	₹ 0.54
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 54.94	₹ 0.55
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 55.49	₹ 1.66
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 57.15	₹ 8.57
				Total	₹ 65.72
		Total cost for 1 Mtr.			₹ 6.57
				Say,	₹ 6.60

14.11.2 Of sectional area beyond 40 sq cm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Cum.			
	a. Labours:				
0210	Carpenter (2nd class)	Day	2.000	₹ 380.00	₹ 760.00
0203	Belder	Day	2.000	₹ 300.00	₹ 600.00
	b. Chiesel, sharpening tools, sledge hammers, ropes, scaffolding/ ladder etc. (LS)	1.0%	on	₹ 1,360.00	₹ 13.60
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 1,373.60	₹ 13.74
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 1,387.34	₹ 41.62

	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 1,428.96	₹ 214.34
		Total cost for 1Cum.		Total	₹ 1,643.30
				Say,	₹ 1,643.30

14.12 Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional span of 1 m or part thereof beyond 10 m etc. complete as per direction of the Engineer- in-charge:-

14.12.1 Of sectional area 40 sq cm and below.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Mtr.	Mtr./ Mtr span			
	a. Labours:				
0210	Carpenter (2nd class)	Day	0.006	₹ 380.00	₹ 2.28
0203	Belder	Day	0.008	₹ 300.00	₹ 2.40
	b.Chiesel, sharpening tools, sledge hammers, ropes etc. (LS)	0.5%	on	₹ 4.68	₹ 0.02
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 4.70	₹ 0.05
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 4.75	₹ 0.14
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 4.89	₹ 0.73
				Total	₹ 5.62
		Total cost for 1 Mtr/ Mtr span			₹ 0.56
				Say,	₹ 0.60

14.12.2 Of sectional area beyond 40 sq cm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum per Mtr.	Cum/ Mtr span.			
	a. Labours:				
0210	Carpenter (2nd class)	Day	0.200	₹ 380.00	₹ 76.00
0203	Belder	Day	0.300	₹ 300.00	₹ 90.00
	b.Chiesel, sharpening tools, sledge hammers, ropes etc. (LS)	1.0%	on	₹ 166.00	₹ 1.66
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 167.66	₹ 1.68
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 169.34	₹ 5.08
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 174.42	₹ 26.16
		Total cost for 1 Cum/ Mtr span		Total	₹ 200.58
				Say,	₹ 200.60

14.13 Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional height of 1 m or part thereof beyond 5 m etc. complete as per direction of the Engineer- in-charge:-

14.13.1 Of sectional area 40 sq cm and below.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Mtr.	Mtr./ Mtr span			
	a. Labours:				
0210	Carpenter (2nd class)	Day	0.010	₹ 380.00	₹ 3.80
0203	Belder	Day	0.020	₹ 300.00	₹ 6.00
	b.Chiesel, sharpening tools, sledge hammers, ropes etc. (LS)	1.0%	on	₹ 9.80	₹ 0.10
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 9.90	₹ 0.10
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 10.00	₹ 0.30
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 10.30	₹ 1.55

			Total	₹	11.85
		Total cost for 1 Mtr/ Mtr span		₹	1.19
			Say,	₹	1.20

14.13.2 Of sectional area beyond 40 sq cm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum per Mtr.	Cum/ Mtr span.			
	a. Labours:				
0210	Carpenter (2nd class)	Day	0.250	₹ 380.00	₹ 95.00
0203	Belder	Day	0.500	₹ 300.00	₹ 150.00
	b. Chiesel, sharpening tools, sledge hammers, ropes etc. (LS)	1.0%	on	₹ 245.00	₹ 2.45
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 247.45	₹ 2.47
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 249.92	₹ 7.50
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 257.42	₹ 38.61
		Total cost for 1 Cum/ Mtr span		Total	₹ 296.03
				Say,	₹ 296.00

14.14 Dismantling steel work in single section including dismembering and stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m etc. complete as per direction of the Engineer- in-charge:-

14.14.1 R.S Joists.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100.00 Kg.	Kg.			
	a. Labours:				
0224	Mate	Day	0.020	₹ 300.00	₹ 6.00
0215	Fitter	Day	0.100	₹ 380.00	₹ 38.00
0212	Helper	Day	0.100	₹ 300.00	₹ 30.00
0211	Watchman	Day	0.010	₹ 300.00	₹ 3.00
	b. Gas cutters, pulleys, ropes, scaffolding etc. (LS)	1.0%	on	₹ 77.00	₹ 0.77
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 77.77	₹ 0.78
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 78.55	₹ 2.36
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 80.91	₹ 12.14
				Total	₹ 93.05
		Total cost for 1 Kg.			₹ 0.93
				Say,	₹ 0.90

14.14.2 Channels, angles, tees and flats.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100.00 Kg.	Kg.			
	a. Labours:				
0224	Mate	Day	0.010	₹ 300.00	₹ 3.00
0215	Fitter	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
0211	Watchman	Day	0.010	₹ 300.00	₹ 3.00
	b. Gas cutters, pulleys, ropes, scaffolding etc. (LS)	1.0%	on	₹ 40.00	₹ 0.40
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 40.40	₹ 0.40
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 40.80	₹ 1.22
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 42.02	₹ 6.30
				Total	₹ 48.32
		Total cost for 1 Kg.			₹ 0.48
				Say,	₹ 0.50

- 14.15 Dismantling steel work in built up section in channels, angles, tees, flats including all gusset plates, bolts, nuts, cutting rivets, welding including dismembering and stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m etc. complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100.00 Kg.	Kg.			
	a. Labours:				
0224	Mate	Day	0.030	₹ 300.00	₹ 9.00
0215	Fitter	Day	0.150	₹ 380.00	₹ 57.00
0212	Helper	Day	0.200	₹ 300.00	₹ 60.00
0212	Khalashi	Day	0.100	₹ 300.00	₹ 30.00
0211	Watchman	Day	0.010	₹ 300.00	₹ 3.00
	b. Gas cutters, gas, pulleys, ropes, ladders/ scaffolding etc. (LS)	1.0%	on	₹ 159.00	₹ 1.59
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 160.59	₹ 1.61
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 162.20	₹ 4.87
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 167.07	₹ 25.06
				Total	₹ 192.13
		Total cost for 1 Kg.			₹ 1.92
				Say,	₹ 1.90

- 14.16 Dismantling steel work in built up section manually / mechanically without dismembering and stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m etc. complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100.00 Kg.	Kg.			
	a. Labours:				
0224	Mate	Day	0.030	₹ 300.00	₹ 9.00
0215	Fitter	Day	0.100	₹ 380.00	₹ 38.00
0212	Helper	Day	0.100	₹ 300.00	₹ 30.00
0212	Khalashi	Day	0.100	₹ 300.00	₹ 30.00
0211	Watchman	Day	0.010	₹ 300.00	₹ 3.00
	b. Gas cutters, gas, pulleys, ropes, ladders/ scaffolding etc. (LS)	1.0%	on	₹ 110.00	₹ 1.10
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 111.10	₹ 1.11
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 112.21	₹ 3.37
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 115.58	₹ 17.34
				Total	₹ 132.92
		Total cost for 1 Kg.			₹ 1.33
				Say,	₹ 1.30

- 14.17 Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional span of 1 m or part thereof beyond 10 m etc. complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Kg per Mtr. span.	Kg/ Mtr span			
	a. Labours:				
0215	Fitter	Day	0.003	₹ 380.00	₹ 1.14
0212	Helper	Day	0.001	₹ 300.00	₹ 0.30
0203	Belder	Day	0.004	₹ 300.00	₹ 1.20
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 2.64	₹ 0.03
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 2.67	₹ 0.08
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 2.75	₹ 0.41
				Total	₹ 3.16

		Total cost for 1 Kg/ Mtr span		₹ 0.32
			Say,	₹ 0.30

14.18 Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional height of 1 m or part thereof beyond 5 m etc. complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Kg per Mtr. height.	Kg/ Mtr height			
	a. Labours:				
0215	Fitter	Day	0.003	₹ 380.00	₹ 1.14
0212	Helper	Day	0.001	₹ 300.00	₹ 0.30
0203	Belder	Day	0.004	₹ 300.00	₹ 1.20
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 2.64	₹ 0.03
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 2.67	₹ 0.08
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 2.75	₹ 0.41
				Total	₹ 3.16
		Total cost for 1 Kg/ Mtr height			₹ 0.32
			Say,		₹ 0.30

14.19 Dismantling dry brick pitching in floors, drains etc. including stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m etc. complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.000 Cum.	Kg/ Mtr.			
	a. Labours:				
0224	Mate	Day	0.050	₹ 300.00	₹ 15.00
0203	Belder	Day	0.350	₹ 300.00	₹ 105.00
0212	Coolie	Day	0.900	₹ 300.00	₹ 270.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 390.00	₹ 3.90
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 393.90	₹ 11.82
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 405.72	₹ 60.86
		Total cost for 1 Cum.		Total	₹ 466.58
			Say,		₹ 466.60

14.20 Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.

15.20.1 For thickness of tiles 10 mm to 25 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm	sqm			
	a. Labours:				
0220	Mason (brick layer) 2nd class	Day	0.300	₹ 380.00	₹ 114.00
0203	Belder	Day	0.120	₹ 300.00	₹ 36.00
0212	Coolie	Day	0.240	₹ 300.00	₹ 72.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 222.00	₹ 2.22
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 224.22	₹ 6.73
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 230.95	₹ 34.64
		Total cost for 10 sqm		Total	₹ 265.59
		Total cost for 1 sqm		Total	₹ 26.56
			Say,		₹ 26.60

15.20.2 For thickness of tiles above 25 mm and up to 40 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm	sqm			
	a. Labours:				

0220	Mason (brick layer) 2nd class	Day	0.590	₹	380.00	₹	224.20
0203	Belder	Day	0.180	₹	300.00	₹	54.00
0212	Coolie	Day	0.240	₹	300.00	₹	72.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹	350.20	₹	3.50
	c. Sundries & contingencies: @ 3% on total	3%	on	₹	353.70	₹	10.61
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹	364.31	₹	54.65
		Total cost for 10 sqm		Total	₹	418.96	
		Total cost for 1 sqm		Total	₹	41.90	
				Say,	₹	41.90	

14.21 Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm	sqm			
	a. Labours:				
0212	Coolie	Day	0.750	₹ 300.00	₹ 225.00
0203	Belder	Day	1.770	₹ 300.00	₹ 531.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 756.00	₹ 7.56
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 763.56	₹ 22.91
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 786.47	₹ 117.97
		Total cost for 10 sqm		Total	₹ 904.44
		Total cost for 1 sqm		Total	₹ 90.44
				Say,	₹ 90.40

14.22 Dismantling GS sheet roofing including ridges, hips, valleys, gutters wind ties etc. including dismembering and stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m etc.complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.060	₹ 300.00	₹ 18.00
0210	Carpenter (2nd class)	Day	0.450	₹ 380.00	₹ 171.00
0212	Helper	Day	0.850	₹ 300.00	₹ 255.00
0211	Watchman	Day	0.100	₹ 300.00	₹ 30.00
	b. Pulleys, ropes, ladders/ scaffolding etc. (LS)	4.0%	on	₹ 474.00	₹ 18.96
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 492.96	₹ 4.93
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 497.89	₹ 14.94
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 512.83	₹ 76.92
				Total	₹ 589.75
		Total cost for 1 Sqm.			₹ 58.98
				Say,	₹ 59.00

14.23 Dismantling old plaster or pointing, raking out joints, cleaning and preparing the surface for re-plastering or re-pointing including disposal of rubbish to the dumping ground with all leads and lifts etc.complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Labours:				
0203	Belder	Day	0.360	₹ 300.00	₹ 108.00
0212	Coolie	Day	0.080	₹ 300.00	₹ 24.00
0205	Waterman	Day	0.070	₹ 300.00	₹ 21.00
	b. Chiesel, raking tools, wire brushes, ladders/ scaffolding etc. (LS)	3.0%	on	₹ 153.00	₹ 4.59
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 157.59	₹ 1.58
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 159.17	₹ 4.78
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 163.95	₹ 24.59
				Total	₹ 188.54

		Total cost for 1 Sqm.		₹ 18.85
			Say,	₹ 18.90

14.24 Dismantling old glass panes from wooden / steel structures including stacking of serviceable materials and disposal of rubbish and unserviceable materials to the dumping ground with all leads and lifts etc.complete as per direction of the Engineer- in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm.	Sqm.			
	a. Labours:				
0224	Mate	Day	0.020	₹ 300.00	₹ 6.00
0210	Carpenter (2nd class)	Day	0.100	₹ 380.00	₹ 38.00
0212	Helper	Day	0.100	₹ 300.00	₹ 30.00
	b. Chiesel, raking tools, wire brushes, ladders/scaffolding etc. (LS)	1.0%	on	₹ 74.00	₹ 0.74
	c. Water charges : @ 1.00% on total	1.0%	on	₹ 74.74	₹ 0.75
	d. Sundries & contingencies: @ 3% on total	3%	on	₹ 75.49	₹ 2.26
	e. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 77.75	₹ 11.66
				Total	₹ 89.41
		Total cost for 1 Sqm.			₹ 8.94
				Say,	₹ 8.90

14.25 Dismantling ballies or wooden posts and struts including stacking within 50 metres lead.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 50.00 m.	m			
	a. Labours:				
0203	Belder	Day	0.500	₹ 300.00	₹ 150.00
0212	Coolie	Day	0.500	₹ 300.00	₹ 150.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 300.00	₹ 3.00
	c. Sundries & contingencies: @ 3% on total	2%	on	₹ 303.00	₹ 6.06
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 309.06	₹ 46.36
				Total	₹ 355.42
		Total cost for 1 m.			₹ 7.11
				Say,	₹ 7.10

14.26 Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of:

14.26.1 T' or 'L' iron or pipe

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for each	each			
	a. Labours:				
0203	Belder	Day	0.107	₹ 300.00	₹ 32.10
0212	Coolie	Day	0.100	₹ 300.00	₹ 30.00
	b. Excavation, transporting and stacking the posts to the required place within 50 metre s lead, refilling the pit and dressing the same : @ 1.00% on total	3.0%	on	₹ 62.10	₹ 1.86
	c. Extra for lifting of R.C.C. posts being heavier than L iron and cleaning the posts of stacking concrete: @ 1.00% on total	15.0%	on	₹ 62.10	₹ 9.32
	d. Water charges : @ 1.00% on total	1.0%	on	₹ 62.10	₹ 0.62
	e. Sundries & contingencies: @ 3% on total	3%	on	₹ 62.72	₹ 1.88
	f. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 64.60	₹ 9.69

			Total	₹	85.47
		Total cost for each		₹	85.47
			Say,	₹	85.50

14.26.2 RCC

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for each	each			
	a. Labours:				
0203	Belder	Day	0.150	₹ 300.00	₹ 45.00
0212	Coolie	Day	0.100	₹ 300.00	₹ 30.00
	b. Excavation, transporting and stacking the posts to the required place within 50 metre s lead, refilling the pit and dressing the same : @ 1.00% on total	3.0%	on	₹ 75.00	₹ 2.25
	c. Extra for lifting of R.C.C. posts being heavier than L iron and cleaning the posts of stacking concrete: @ 1.00% on total	25.0%	on	₹ 75.00	₹ 18.75
	d. Water charges : @ 1.00% on total	1.0%	on	₹ 75.00	₹ 0.75
	e. Sundries & contingencies: @ 3% on total	3%	on	₹ 75.75	₹ 2.27
	f. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 78.02	₹ 11.70
				Total	₹ 110.72
		Total cost for each			₹ 110.72
			Say,		₹ 110.70

14.27 Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead :**14.27.1 Thickness up to 40 mm**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Labours:				
0203	Belder	Day	2.000	₹ 300.00	₹ 600.00
0220	Mason (brick layer) 2nd class	Day	0.200	₹ 380.00	₹ 76.00
0212	Coolie	Day	0.500	₹ 300.00	₹ 150.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 826.00	₹ 8.26
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 834.26	₹ 25.03
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 859.29	₹ 128.89
				Total	₹ 988.18
		Total cost for 1 sqm.			₹ 98.82
			Say,		₹ 98.80

14.27.2 Thickness above 40 mm up to 75 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm.	Sqm.			
	a. Labours:				
0203	Belder	Day	3.000	₹ 300.00	₹ 900.00
0220	Mason (brick layer) 2nd class	Day	0.300	₹ 380.00	₹ 114.00
0212	Coolie	Day	0.750	₹ 300.00	₹ 225.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 1,239.00	₹ 12.39
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 1,251.39	₹ 37.54
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 1,288.93	₹ 193.34
				Total	₹ 1,482.27
		Total cost for 1 sqm.			₹ 148.23
			Say,		₹ 148.20

14.28 Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :

14.28.1 15 mm to 40 mm nominal bore

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre	m			
	a. Labours:				
0203	Belder	Day	0.660	₹ 300.00	₹ 198.00
0212	Coolie	Day	0.660	₹ 300.00	₹ 198.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 396.00	₹ 3.96
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 399.96	₹ 12.00
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 411.96	₹ 61.79
				Total	₹ 473.75
		Total cost for 1 m			₹ 47.38
				Say,	₹ 47.40

14.28.2 Above 40 mm nominal bore

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre	m			
	a. Labours:				
0203	Belder	Day	0.850	₹ 300.00	₹ 255.00
0212	Coolie	Day	0.750	₹ 300.00	₹ 225.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 480.00	₹ 4.80
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 484.80	₹ 14.54
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 499.34	₹ 74.90
				Total	₹ 574.24
		Total cost for 1 m			₹ 57.42
				Say,	₹ 57.40

14.29 Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge:

14.29.1 Up to 150 mm diameter

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 40.26 metre or 11 Nos. joints	m			
	Earth work in excavation for dismantling pipes including refilling of excavated earth 1x40.26x0.55x0.75 m =16.61cum Deduct for pipes of average 100 mm dia =1x40.26x(22/7)/4x(0.118)x(0.118) =0.44cum Total =16.17cum				
	Rate as per Item No.2.13 of SH: EARTH WORK "A"	cum	16.170	₹ 150.10	₹ 2,427.12
	Rate as per Item No.2.16 of SH: EARTH WORK "B"	cum	16.170	₹ 116.40	₹ 1,882.19
	Fuel wood	qtl.	0.460	₹ 400.00	₹ 184.00
02004	Kerosine oil	litre	0.380	₹ 48.00	₹ 18.24
	a. Labours:				
0215	Fitter (grade 1)	Day	0.630	₹ 380.00	₹ 239.40
0203	Beldar	Day	4.500	₹ 300.00	₹ 1,350.00
	b. Water charges : @ 1.00% on total except A & B	1.0%	on	₹ 1,791.64	₹ 17.92
	c. Sundries & contingencies: @ 3% on total except A & B	3%	on	₹ 1,809.56	₹ 54.29
	d. Contractor's profit & overheads: @ 15% on total except A & B	15%	on	₹ 1,863.85	₹ 279.58

			Total	₹ 6,452.74
		Total cost for 1 m		₹ 160.28
			Say,	₹ 160.30

14.29.2 Above 150 mm dia up to 300 mm dia

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 40.26 metre or 11 Nos. joints	m			
	Earth work in excavation for dismantling pipes including refilling of excavated earth 1x40.26x0.65x0.75 m =19.63cum Deduct for pipes of average 250 mm dia =1x40.26x(22/7)/4x(0.274)x(0.274) =2.37cum Total =17.26cum				
	Rate as per Item No.2.13 of SH: EARTH WORK "A"	cum	17.260	₹ 150.10	₹ 2,590.73
	Rate as per Item No.2.16 of SH: EARTH WORK "B"	cum	17.260	₹ 116.40	₹ 2,009.06
	Fuel wood	qtl.	1.030	₹ 400.00	₹ 412.00
02004	Kerosine oil	litre	1.140	₹ 48.00	₹ 54.72
	a. Labours:				
0215	Fitter (grade 1)	Day	1.300	₹ 380.00	₹ 494.00
0203	Beldar	Day	7.500	₹ 300.00	₹ 2,250.00
	b. Water charges : @ 1.00% on total except A & B	1.0%	on	₹ 3,210.72	₹ 32.11
	c. Sundries & contingencies: @ 3% on total except A & B	3%	on	₹ 3,242.83	₹ 97.28
	d. Contractor's profit & overheads: @ 15% on total except A & B	15%	on	₹ 3,340.11	₹ 501.02
				Total	₹ 8,440.92
			Total cost for 1 m		₹ 209.66
				Say,	₹ 209.70

14.29.3 Above 300 mm diameter

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 40.26 metre or 11 Nos. joints	m			
	Earth work in excavation for dismantling pipes including refilling of excavated earth 1x40.26x0.85x0.75 m =25.67cum Deduct for pipes of average 450 mm dia =1x40.26x(22/7)/4x(0.48)x(0.48) =7.29cum Total =18.38cum				
	Rate as per Item No.2.13 of SH: EARTH WORK "A"	cum	18.380	₹ 150.10	₹ 2,758.84
	Rate as per Item No.2.16 of SH: EARTH WORK "B"	cum	18.380	₹ 116.40	₹ 2,139.43
	Fuel wood	qtl.	1.030	₹ 400.00	₹ 412.00
02004	Kerosine oil	litre	1.140	₹ 48.00	₹ 54.72
	a. Labours:				
0215	Fitter (grade 1)	Day	2.250	₹ 380.00	₹ 855.00
0203	Beldar	Day	11.500	₹ 300.00	₹ 3,450.00
	b. Water charges : @ 1.00% on total except A & B	1.0%	on	₹ 4,771.72	₹ 47.72
	c. Sundries & contingencies: @ 3% on total except A & B	3%	on	₹ 4,819.44	₹ 144.58
	d. Contractor's profit & overheads: @ 15% on total except A & B	15%	on	₹ 4,964.02	₹ 744.60
				Total	₹ 10,606.89
			Total cost for 1 m		₹ 263.46
				Say,	₹ 263.50

- 14.30 Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 man hole	each			
	Demolition of R.C.C. slab 1.3x1.2x0.15 m =0.234cum Less cover 0.61x0.455x0.15 m =0.042cum =0.192cum				
	a. Labours:				
0203	Beldar	Day	0.500	₹ 300.00	₹ 150.00
0212	Coolie	Day	0.150	₹ 300.00	₹ 45.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 195.00	₹ 1.95
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 196.95	₹ 5.91
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 202.86	₹ 30.43
				Total	₹ 233.29
		Total cost for each			₹ 233.29
				Say,	₹ 233.30

- 14.31 Taking out C.I. cover with frame from R.C.C. top slab of inspection chambers of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 man hole	each			
	Demolition of R.C.C. slab 1.1x0.9x0.15 m =0.148cum Less cover 0.61x0.455x0.15 m =0.042cum =0.106cum Say 0.11cum				
	a. Labours:				
0203	Beldar	Day	0.290	₹ 300.00	₹ 87.00
0212	Coolie	Day	0.100	₹ 300.00	₹ 30.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 117.00	₹ 1.17
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 118.17	₹ 3.55
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 121.72	₹ 18.26
				Total	₹ 139.98
		Total cost for each			₹ 139.98
				Say,	₹ 140.00

- 14.32 Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.**

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for each	each			
	a. Labours:				
0215	Fitter (grade 1)	Day	0.250	₹ 380.00	₹ 95.00
0203	Beldar	Day	0.500	₹ 300.00	₹ 150.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 245.00	₹ 2.45
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 247.45	₹ 7.42
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 254.87	₹ 38.23
				Total	₹ 293.10
		Total cost for each			₹ 293.10
				Say,	₹ 293.10

14.33 Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sqm	sqm			
	a. Labours:				
0203	Beldar	Day	0.300	₹ 300.00	₹ 90.00
0210	Carpenter 2nd class	Day	0.200	₹ 380.00	₹ 76.00
	b. Water charges : @ 1.00% on total	1.0%	on	₹ 166.00	₹ 1.66
	c. Sundries & contingencies: @ 3% on total	3%	on	₹ 167.66	₹ 5.03
	d. Contractor's profit & overheads: @ 15% on total	15%	on	₹ 172.69	₹ 25.90
				Total	₹ 198.59
		Total cost for 1 sqm			₹ 19.86
				Say,	₹ 19.90

S U B - H E A D - 1 5



P I L E W O R K

**SUB HEAD : 15.0 /PILING WORK
BASIC RATES**

Code No.	Description	Unit	Rate
0111	Hire and running charges of tipper	Day	₹ 2,250.00
0110	Hire and running charges of loader.	Day	₹ 5,250.00
0108	Hire and running charges of hydraulic piling rig with power unit etc.including complete accessories and shifting at site.	Day	₹ 34,000.00
0109	Hire and running charges of light crane.	Day	₹ 2,484.00
0106	Hire and running charges of bentonite pump.	Day	₹ 4,200.00
0112	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories.	Day	₹ 35,000.00
0107	Hire and running charges of crane 20 tonne capacity.	Day	₹ 10,091.00
0131	Hire and running charges of of Tripod and Mechanical Winch machine complete with power unit and accessories.	Day	₹ 2,200.00
0132	Hire and running charges of drill machine upto 400 mm dia. (including cost of mobil oil, diesel consumption in ordinary soil and operator)	Day	₹ 7,900.00
0133	Pile integrity testing equipment	Day	₹ 3,000.00
0203	Beldar	Day	₹ 300.00
0225	Mistry	Day	₹ 380.00
0233	Technician	Day	₹ 700.00
0212	Helper	Day	₹ 300.00
15001	C.I. pile shoe.	kg	₹ 59.00
15002	M.S. clamps for pile shoe.	kg	₹ 52.00
15003	Bentonite.	tonne	₹ 3,220.00
15004	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and up to 50 tonne capacity pile.	Per Test	₹ 29,250.00
15005	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & above 50 tonne and up to 100 tonne	Per Test	₹ 39,000.00

Code No.	Description	Unit	Rate
15006	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & group of two or more up to 50 tonne	Per Test	₹ 48,950.00
15007	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile up to 50 tonne capacity.	Per Test	₹ 14,985.00
15008	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile.	Per Test	₹ 23,865.00
15009	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part- IV) including preparation of pile head etc. for Group of two piles up to 50 tonne capacity each.	Per Test	₹ 29,970.00
15010	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile up to 50 tonne capacity.	Per Test	₹ 14,985.00
15011	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile above 50 tonne capacity.	Per Test	₹ 23,865.00
0468	Carriage: Steel	Tonne	₹ 110.94
0407	Carriage: Cast iron fittings	Tonne	₹ 110.94
0455	Carriage: Bentonite	Tonne	₹ 124.80

SUB HEAD : 15.0
PILE WORK

Note:

- 1 Pile driving rigs including vibratory hammers are assumed to be self contained with power units and necessary accessories required for driving.
- 2 The quantity of concrete which is required to be stripped off upto a minimum height of 600 mm above the designed top level of the pile has been taken into account in the rate analysis. Payment will be made upto design top level / bottom of pile cap.
- 3 Rate analysis for various type of piles like driven cast-in-situ, bored cast-in-situ, driven precast RCC pile and other types of piles have been included. If the steel casing in case of driven pile is required to be retained, the same is required to be priced separately.
- 4 The levelling course below the pile cap is proposed with M15 grade concrete.
- 5 The minimum grade of concrete shall be M25 with minimum cement content of 410 kg/cum. However, for other grades, additional amount to be added for richer mixers to the respective diameter of pile vide **Item code No. 5.34 SH. RCC Work.**
- 6 The top of the pile shall project 50 mm into the pile cap and reinforcement of pile shall be fully anchored in pile cap.
- 7 The minimum thickness of pile cap should be atleast 0.6 m or 1.5 times the diameter of the pile whichever is more.
- 8 Guidance for piles is to be obtained from IS : 2911.
- 9 Concrete in driven cast-in-situ piles shall be cast upto a height of 600 mm above the designed top level of pile, which shall be stripped off to obtain sound concrete either before final set or after 3 days.

15.1 Providing, driving with hydraulic piling rigs with power units and installing driven cast-in-situ reinforced cement concrete piles of grade M25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):

15.1.1 400 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20.00 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete = $3.1428/4 \times 0.40^2 \times 20 = 2.514$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	2.514	₹ 9,896.50	₹ 24,879.80
15001	Pile shoes CI @ 80 kg/ pile	Kg	80.00	₹ 59.00	₹ 4,720.00
15002	MS clamps for Pile shoes @ 35 Kg/ pile	Kg	35.00	₹ 52.00	₹ 1,820.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.360	₹ 34,000.00	₹ 12,240.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
	b. Carriage:				
	Concrete	Already included in item			
0407	Pile shoes CI	Tonne	0.080	₹ 110.94	₹ 8.88
0468	MS clamps for Pile shoes	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.080	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.000	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 19,572.20	₹ 195.72
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 19,767.92	₹ 593.04
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 20,360.96	₹ 3,054.14
				Total	₹ 48,294.90
	Total cost for 1 Mtr.				₹ 2,414.75
				Say,	₹ 2,414.80

15.1.2 450 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20.00 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete -3.1428/4x0.45 ² x20 = 3.182 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	3.182	₹ 9,896.50	₹ 31,490.66
15001	Pile shoes CI @ 80 kg/ pile	Kg	80.00	₹ 59.00	₹ 4,720.00
15002	MS clamps for Pile shoes @ 35 Kg/ pile	Kg	35.00	₹ 52.00	₹ 1,820.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.470	₹ 34,000.00	₹ 15,980.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
	b. Carriage:				
	Concrete		Already included in item		
0407	Pile shoes CI	Tonne	0.080	₹ 110.94	₹ 8.88
0468	MS clamps for Pile shoes	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.080	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.000	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 23,312.20	₹ 233.12
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 23,545.32	₹ 706.36
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 24,251.68	₹ 3,637.75
				Total	₹ 59,380.09
	Total cost for 1 Mtr.				₹ 2,969.00
				Say,	₹ 2,969.00

15.1.3 500 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20.00 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete 3.1428/4x0.50 ² x20 = 3.928 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	3.928	₹ 9,896.50	₹ 38,873.45
15001	Pile shoes CI @ 80 kg/ pile	Kg	80.00	₹ 59.00	₹ 4,720.00
15002	MS clamps for Pile shoes @ 35 Kg/ pile	Kg	35.00	₹ 52.00	₹ 1,820.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.600	₹ 34,000.00	₹ 20,400.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
	b. Carriage:				
	Concrete		Already included in item		
0407	Pile shoes CI	Tonne	0.080	₹ 110.94	₹ 8.88
0468	MS clamps for Pile shoes	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.080	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.000	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 27,732.20	₹ 277.32
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 28,009.52	₹ 840.29
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 28,849.81	₹ 4,327.47
				Total	₹ 72,050.73
	Total cost for 1 Mtr.				₹ 3,602.54
				Say,	₹ 3,602.50

15.1.4 550 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20.00 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete 3.1428 /4x0.55 ² x20 = 4.753 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	4.753	₹ 9,896.50	₹ 47,038.06
15001	Pile shoes CI @ 80 kg/ pile	Kg	80.00	₹ 59.00	₹ 4,720.00
15002	MS clamps for Pile shoes @ 35 Kg/ pile	Kg	35.00	₹ 52.00	₹ 1,820.00

0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.600	₹ 34,000.00	₹ 20,400.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
	b. Carriage:				
	Concrete		Already included in item		
0407	Pile shoes CI	Tonne	0.080	₹ 110.94	₹ 8.88
0468	MS clamps for Pile shoes	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.080	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.000	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 27,732.20	₹ 277.32
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 28,009.52	₹ 840.29
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 28,849.81	₹ 4,327.47
				Total	₹ 80,215.34
	Total cost for 1 Mtr.				₹ 4,010.77
				Say,	₹ 4,010.80

15.1.5 600 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20.00 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete $3.14/4 \times 0.60^2 \times 20 = 5.652$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	5.652	₹ 9,896.50	₹ 55,935.02
15001	Pile shoes CI @ 80 kg/ pile	Kg	80.00	₹ 59.00	₹ 4,720.00
15002	MS clamps for Pile shoes @ 35 Kg/ pile	Kg	35.00	₹ 52.00	₹ 1,820.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.750	₹ 34,000.00	₹ 25,500.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
	b. Carriage:				
	Concrete		Already included in item		
0407	Pile shoes CI	Tonne	0.080	₹ 110.94	₹ 8.88
0468	MS clamps for Pile shoes	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.100	₹ 380.00	₹ 38.00
0203	Beldar	Day	2.330	₹ 300.00	₹ 699.00
	d. Water charges : (ex/c A)	1%	on	₹ 32,938.80	₹ 329.39
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 33,268.19	₹ 998.05
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 34,266.24	₹ 5,139.94
				Total	₹ 95,341.20
	Total cost for 1 Mtr.				₹ 4,767.06
				Say,	₹ 4,767.10

15.1.6 750 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 15.00 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete $3.1428/4 \times 0.75^2 \times 15 = 6.629$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	6.629	₹ 9,896.50	₹ 65,603.90
15001	Pile shoes CI @ 80 kg/ pile	Kg	80.00	₹ 59.00	₹ 4,720.00
15002	MS clamps for Pile shoes @ 35 Kg/ pile	Kg	35.00	₹ 52.00	₹ 1,820.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.700	₹ 34,000.00	₹ 23,800.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
	b. Carriage:				
	Concrete		Already included in item		
0407	Pile shoes CI	Tonne	0.080	₹ 110.94	₹ 8.88
0468	MS clamps for Pile shoes	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				

0225	Work supervisor/ mistri	Day	0.140	₹ 380.00	₹ 53.20
0203	Beldar	Day	3.500	₹ 300.00	₹ 1,050.00
	d. Water charges : (ex/c A)	1%	on	₹ 31,605.00	₹ 316.05
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 31,921.05	₹ 957.63
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 32,878.68	₹ 4,931.80
				Total	₹ 103,414.38
	Total cost for 1 Mtr.				₹ 6,894.29
				Say,	₹ 6,894.30

- 15.2 Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by *percussion drilling using Direct Mud Circulation (DMC) or Bailer and Chisel Technique by Tripod and Mechanical Winch Machine* all complete, including removal of excavated earth with all its lifts and leads. (Length of pile for payment shall be measured upto bottom of pile cap).

Note: Truck Mounted rotary / TMR / Tubewell Boring Machine shall not be used.

15.2.1 450 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials:				
	Concrete -3.1428/4x0.452x20 = 3.182 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	3.182	₹ 9,896.50	₹ 31,490.66
15003	Bentonite	Tonne	0.250	₹ 3,220.00	₹ 805.00
0131	Hire and running charges of of Tripod and Mechanical Winch machine complete with power unit and accessories.	Day	0.940	₹ 2,200.00	₹ 2,068.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.38	₹ 4,200.00	₹ 1,596.00
0110	Hire and running charges of loader.	Day	0.30	₹ 5,250.00	₹ 1,575.00
0111	Hire and running charges of tipper	Day	0.30	₹ 2,250.00	₹ 675.00
	b. Carriage:				
	Concrete		Already included in item		
0455	Bentonite	Tonne	0.250	₹ 124.80	₹ 31.20
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	2.50	₹ 300.00	₹ 750.00
	d. Water charges : (ex/c A)	1%	on	₹ 7,694.84	₹ 76.95
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 7,771.79	₹ 233.15
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 8,004.94	₹ 1,200.74
				Total	₹ 40,696.34
	Total cost for 1 Mtr.				₹ 2,034.82
				Say,	₹ 2,034.80

15.2.2 500 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials:				
	Concrete 3.1428/4x0.50 ² x20 = 3.928 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	3.928	₹ 9,896.50	₹ 38,873.45
15003	Bentonite	Tonne	0.280	₹ 3,220.00	₹ 901.60
0131	Hire and running charges of of Tripod and Mechanical Winch machine complete with power unit and accessories.	Day	1.20	₹ 2,200.00	₹ 2,640.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.38	₹ 4,200.00	₹ 1,596.00
0110	Hire and running charges of loader.	Day	0.30	₹ 5,250.00	₹ 1,575.00
0111	Hire and running charges of tipper	Day	0.30	₹ 2,250.00	₹ 675.00
	b. Carriage:				
	Concrete		Already included in item		

	Bentonite	Tonne	0.280	₹ 124.80	₹ 34.94
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	2.50	₹ 300.00	₹ 750.00
	d. Water charges : (ex/c A)	1%	on	₹ 8,367.18	₹ 83.67
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 8,450.85	₹ 253.53
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 8,704.38	₹ 1,305.66
				Total	₹ 48,883.49
	Total cost for 1 Mtr.				₹ 2,444.17
				Say,	₹ 2,444.20

15.2.3 550 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials:				
	Concrete $3.1428/4 \times 0.55^2 \times 20 = 4.753$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	4.753	₹ 9,896.50	₹ 47,038.06
15003	Bentonite	Tonne	0.300	₹ 3,220.00	₹ 966.00
0131	Hire and running charges of of Tripod and Mechanical Winch machine complete with power unit and accessories.	Day	1.40	₹ 2,200.00	₹ 3,080.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.38	₹ 4,200.00	₹ 1,596.00
0110	Hire and running charges of loader.	Day	0.30	₹ 5,250.00	₹ 1,575.00
0111	Hire and running charges of tipper	Day	0.30	₹ 2,250.00	₹ 675.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.300	₹ 124.80	₹ 37.44
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	2.75	₹ 300.00	₹ 825.00
	d. Water charges : (ex/c A)	1%	on	₹ 8,949.08	₹ 89.49
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 9,038.57	₹ 271.16
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 9,309.73	₹ 1,396.46
				Total	₹ 57,744.25
	Total cost for 1 Mtr.				₹ 2,887.21
				Say,	₹ 2,887.20

15.2.4 600 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials:				
	Concrete $3.1428 / 4 \times 0.60^2 \times 20 = 5.652$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	5.652	₹ 9,896.50	₹ 55,935.02
15003	Bentonite	Tonne	0.330	₹ 3,220.00	₹ 1,062.60
0131	Hire and running charges of of Tripod and Mechanical Winch machine complete with power unit and accessories.	Day	1.50	₹ 2,200.00	₹ 3,300.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.38	₹ 4,200.00	₹ 1,596.00
0110	Hire and running charges of loader.	Day	0.30	₹ 5,250.00	₹ 1,575.00
0111	Hire and running charges of tipper	Day	0.30	₹ 2,250.00	₹ 675.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.330	₹ 124.80	₹ 41.18
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	d. Water charges : (ex/c A)	1%	on	₹ 9,344.42	₹ 93.44
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 9,437.86	₹ 283.14

	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 9,721.00	₹ 1,458.15
				Total	₹ 67,114.17
	Total cost for 1 Mtr.				₹ 3,355.71
				Say,	₹ 3,355.70

15.2.5 750 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 15.00 Mtr.	Mtr.			
	a. Materials:				
	Concrete $3.1428 / 4 \times 0.75^2 \times 15 = 6.629$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	6.629	₹ 9,896.50	₹ 65,603.90
15003	Bentonite	Tonne	0.30	₹ 3,220.00	₹ 966.00
0131	Hire and running charges of of Tripod and Mechanical Winch machine complete with power unit and accessories.	Day	1.40	₹ 2,200.00	₹ 3,080.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.75	₹ 4,200.00	₹ 3,150.00
0110	Hire and running charges of loader.	Day	0.30	₹ 5,250.00	₹ 1,575.00
0111	Hire and running charges of tipper	Day	0.30	₹ 2,250.00	₹ 675.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.30	₹ 124.80	₹ 37.44
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	3.50	₹ 300.00	₹ 1,050.00
	d. Water charges : (ex/c A)	1%	on	₹ 10,735.68	₹ 107.36
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 10,843.04	₹ 325.29
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 11,168.33	₹ 1,675.25
				Total	₹ 78,447.48
	Total cost for 1 Mtr.				₹ 5,229.83
				Say,	₹ 5,229.80

- 15.3 Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by *Crawler Mounted, telescopic boom hydraulic piling Rig* all complete, including removal of excavated earth with all its lifts and leads. (Length of pile for payment shall be measured upto bottom of pile cap).**

Note: Truck Mounted rotary / TMR / Tubewell Boring Machine shall not be used.

15.3.1 600 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials:				
	Concrete $3.1428 / 4 \times 0.60^2 \times 20 = 5.652$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	5.652	₹ 9,896.50	₹ 55,935.02
15003	Bentonite	Tonne	0.330	₹ 3,220.00	₹ 1,062.60
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.75	₹ 34,000.00	₹ 25,500.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.38	₹ 4,200.00	₹ 1,596.00
0110	Hire and running charges of loader.	Day	0.30	₹ 5,250.00	₹ 1,575.00
0111	Hire and running charges of tipper	Day	0.30	₹ 2,250.00	₹ 675.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.330	₹ 124.80	₹ 41.18
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	d. Water charges & electricity charges: (ex/c A)	1.5%	on	₹ 31,544.42	₹ 473.17

	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 32,017.59	₹ 960.53
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 32,978.12	₹ 4,946.72
				Total	₹ 93,859.86
	Total cost for 1 Mtr.				₹ 4,692.99
				Say,	₹ 4,693.00

15.3.2 750 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 15.00 Mtr.	Mtr.			
	a. Materials:				
	Concrete $3.1428 / 4 \times 0.75^2 \times 15 = 6.629$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	6.629	₹ 9,896.50	₹ 65,603.90
15003	Bentonite	Tonne	0.30	₹ 3,220.00	₹ 966.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.70	₹ 34,000.00	₹ 23,800.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.75	₹ 4,200.00	₹ 3,150.00
0110	Hire and running charges of loader.	Day	0.30	₹ 5,250.00	₹ 1,575.00
0111	Hire and running charges of tipper	Day	0.30	₹ 2,250.00	₹ 675.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.30	₹ 124.80	₹ 37.44
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.14	₹ 380.00	₹ 53.20
0203	Beldar	Day	3.50	₹ 300.00	₹ 1,050.00
	d. Water charges : (ex/c A)	1%	on	₹ 31,455.68	₹ 314.56
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 31,770.24	₹ 953.11
	f. Contractor's profit & overheads: (ex/c A)	15%	on	₹ 32,723.35	₹ 4,908.50
				Total	₹ 103,235.75
	Total cost for 1 Mtr.				₹ 6,882.38
				Say,	₹ 6,882.40

15.3.3 1000 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Mtr.	Mtr.			
	a. Materials:				
	Concrete $3.1428 / 4 \times 1.00^2 \times 10 = 7.85$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	7.85	₹ 9,896.50	₹ 77,687.53
15003	Bentonite	Tonne	0.35	₹ 3,220.00	₹ 1,127.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.69	₹ 34,000.00	₹ 23,460.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.75	₹ 4,200.00	₹ 3,150.00
0110	Hire and running charges of loader.	Day	0.4	₹ 5,250.00	₹ 2,100.00
0111	Hire and running charges of tipper	Day	0.4	₹ 2,250.00	₹ 900.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.35	₹ 124.80	₹ 43.68
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.16	₹ 380.00	₹ 60.80
0203	Beldar	Day	4.00	₹ 300.00	₹ 1,200.00
	d. Water charges : (ex/c A)	1%	on	₹ 28,096.18	₹ 280.96
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 28,377.14	₹ 851.31
	f. Contractor's profit & overheads: (ex/c A)	0.15	on	₹ 29,228.45	₹ 4,384.27
				Total	₹ 115,394.59
	Total cost for 1 Mtr.				₹ 11,539.46
				Say,	₹ 11,539.50

15.3.4 1200 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 9.00 Mtr.	Mtr.			
	a. Materials:				
	Concrete $3.1428 / 4 \times 1.20^2 \times 9 = 10.17$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	10.17	₹ 9,896.50	₹ 100,647.41
15003	Bentonite	Tonne	0.385	₹ 3,220.00	₹ 1,239.70
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.67	₹ 34,000.00	₹ 22,780.00
0109	Hire and running charges of light crane.	Day	0.06	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.75	₹ 4,200.00	₹ 3,150.00
0110	Hire and running charges of loader.	Day	0.5	₹ 5,250.00	₹ 2,625.00
0111	Hire and running charges of tipper	Day	0.5	₹ 2,250.00	₹ 1,125.00
	b. Carriage:				
	Concrete	Already included in item			
	Bentonite	Tonne	0.385	₹ 124.80	₹ 48.05
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.18	₹ 380.00	₹ 68.40
0203	Beldar	Day	4.50	₹ 300.00	₹ 1,350.00
	d. Water charges : (ex/c A)	1%	on	₹ 28,096.18	₹ 280.96
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 28,377.14	₹ 851.31
	f. Contractor's profit & overheads: (ex/c A)	0.15	on	₹ 29,228.45	₹ 4,384.27
				Total	₹ 138,699.14
	Total cost for 1 Mtr.				₹ 13,869.91
				Say,	₹ 13,869.90

15.3.5 1500 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 9.00 Mtr.	Mtr.			
	a. Materials:				
	Concrete $3.1428 / 4 \times 1.50^2 \times 9 = 15.90$ Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	15.9	₹ 9,896.50	₹ 157,354.35
15003	Bentonite	Tonne	0.45	₹ 3,220.00	₹ 1,449.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.77	₹ 34,000.00	₹ 26,180.00
0109	Hire and running charges of light crane.	Day	0.1	₹ 2,484.00	₹ 248.40
0106	Hire and running charges of bentonite pump.	Day	0.96	₹ 4,200.00	₹ 4,032.00
0110	Hire and running charges of loader.	Day	0.75	₹ 5,250.00	₹ 3,937.50
0111	Hire and running charges of tipper	Day	0.75	₹ 2,250.00	₹ 1,687.50
	b. Carriage:				
	Concrete	Already included in item			
	Bentonite	Tonne	0.45	₹ 124.80	₹ 56.16
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.25	₹ 380.00	₹ 95.00
0203	Beldar	Day	5.00	₹ 300.00	₹ 1,500.00
	d. Water charges : (ex/c A)	1%	on	₹ 28,096.18	₹ 280.96
	e. Sundries (wooden blocks, stripped off to obtain sound concrete etc.) & contingencies: (ex/c A)	3%	on	₹ 28,377.14	₹ 851.31
	f. Contractor's profit & overheads: (ex/c A)	0.15	on	₹ 29,228.45	₹ 4,384.27
				Total	₹ 202,056.45
	Total cost for 1 Mtr.				₹ 20,205.65
				Say,	₹ 20,205.70

15.4 Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete as per specification & the direction of Engineer in-charge (Length of pile for payment shall be measured upto to the bottom of pile cap) :-

15.4.1 300 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 10 Mtr.	Mtr.			
	a. Materials:				
	Stem $-3.1428/4 \times (0.30)^2 \times 9.625 = 0.681$ Cum				
	Bulb $-3.1428/4 \times (0.75)^2 \times 0.075 = 0.033$ Cum				
	$2 \times 3.1428/4 \times (0.525)^2 \times 0.150 = 0.065$ Cum				
	Total concrete '=0.779 cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	0.779	₹ 9,896.50	₹ 7,709.37
15003	Bentonite	Tonne	0.078	₹ 3,220.00	₹ 251.16
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.360	₹ 34,000.00	₹ 12,240.00
0109	Hire and running charges of light crane.	Day	0.030	₹ 2,484.00	₹ 74.52
0106	Hire and running charges of bentonite pump.	Day	0.02	₹ 4,200.00	₹ 84.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.078	₹ 124.80	₹ 9.73
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.08	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 13,289.81	₹ 132.90
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 13,422.71	₹ 402.68
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 13,825.39	₹ 2,073.81
				Total	₹ 23,608.57
	Total cost for 1 Mtr.				₹ 2,360.86
				Say,	₹ 2,360.90

15.4.2 400 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Mtr.	Mtr.			
	a. Materials:				
	Stem $-3.1428/4 \times (0.40)^2 \times 9.30 = 1.169$ cum				
	Bulb $-3.1428/4 \times (1.00)^2 \times 0.1 = 0.079$ cum				
	$2 \times 3.1428/4 \times (0.7)^2 \times 0.30 = 0.231$ cum				
	Total concrete'= 1.479 cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	1.479	₹ 9,896.50	₹ 14,636.92
15003	Bentonite	Tonne	0.150	₹ 3,220.00	₹ 483.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.360	₹ 34,000.00	₹ 12,240.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.020	₹ 4,200.00	₹ 84.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.150	₹ 124.80	₹ 18.72
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.08	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 13,605.16	₹ 136.05
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 13,741.21	₹ 412.24
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 14,153.45	₹ 2,123.02
				Total	₹ 30,913.39
	Total cost for 1 Mtr.				₹ 3,091.34
				Say,	₹ 3,091.30

15.4.3 450 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Mtr.	Mtr.			
	a. Materials:				
	Stem $-3.14/4 \times (0.45)^2 \times 9.212 = 1.465$ cum				
	Bulb $-3.14/4 \times (1.125)^2 \times 0.113 = 0.112$ cum				
	$2 \times 3.14/4 \times (0.788)^2 \times 0.337 = 0.329$ cum				
	Total concrete'= 1.906 cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	1.906	₹ 9,896.50	₹ 18,862.73

15003	Bentonite	Tonne	0.190	₹ 3,220.00	₹ 611.80
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.360	₹ 34,000.00	₹ 12,240.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.020	₹ 4,200.00	₹ 84.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.190	₹ 124.80	₹ 23.71
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.08	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 13,738.95	₹ 137.39
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 13,876.34	₹ 416.29
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 14,292.63	₹ 2,143.89
				Total	₹ 35,299.25
	Total cost for 1 Mtr.				₹ 3,529.93
				Say,	₹ 3,529.90

15.4.4 500 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Mtr.	Mtr.			
	a. Materials:				
	Stem - $3.1428/4 \times (0.50)^2 \times 9.125 = 1.792$ Cum				
	Bulb - $3.1428/4 \times (1.25)^2 \times 0.125 = 0.153$ Cum				
	2x $3.1428/4 \times (0.875)^2 \times 0.375 = 0.451$ Cum				
	Total concrete' = 2.396 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	2.396	₹ 9,896.50	₹ 23,712.01
15003	Bentonite	Tonne	0.200	₹ 3,220.00	₹ 644.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.360	₹ 34,000.00	₹ 12,240.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.020	₹ 4,200.00	₹ 84.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.200	₹ 124.80	₹ 24.96
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.08	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 13,772.40	₹ 137.72
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 13,910.12	₹ 417.30
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 14,327.42	₹ 2,149.11
				Total	₹ 40,188.54
	Total cost for 1 Mtr.				₹ 4,018.85
				Say,	₹ 4,018.90

15.4.5 550 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Mtr.	Mtr.			
	a. Materials:				
	Stem - $3.1428/4 \times (0.55)^2 \times 9.04 = 2.148$ Cum				
	Bulb - $3.1428/4 \times (1.375)^2 \times 0.14 = 0.208$ Cum				
	2x $3.1428/4 \times (0.9625)^2 \times 0.41 = 0.597$ Cum				
	Total concrete' = 2.953 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	2.953	₹ 9,896.50	₹ 29,224.36
15003	Bentonite	Tonne	0.300	₹ 3,220.00	₹ 966.00
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.360	₹ 34,000.00	₹ 12,240.00
0109	Hire and running charges of light crane.	Day	0.060	₹ 2,484.00	₹ 149.04
0106	Hire and running charges of bentonite pump.	Day	0.020	₹ 4,200.00	₹ 84.00
	b. Carriage:				
	Concrete		Already included in item		

	Bentonite	Tonne	0.300	₹ 124.80	₹ 37.44
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.08	₹ 380.00	₹ 30.40
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
	d. Water charges : (ex/c A)	1%	on	₹ 14,106.88	₹ 141.07
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 14,247.95	₹ 427.44
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 14,675.39	₹ 2,201.31
				Total	₹ 46,101.06
	Total cost for 1 Mtr.				₹ 4,610.11
				Say,	₹ 4,610.10

15.5 Extra over item No. 15.4 for boring, providing and installing cast-in-situ additional bulb in under reamed reinforced cement concrete piles, under specified dia meter as per specification & the direction of Engineer in-charge (only the quantity of extra bulbs are to be paid):-

15.5.1 300 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 bulb.	Each			
	a. Materials and T&P:				
	Bulb - 0.033 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	0.0330	₹ 9,896.50	₹ 326.58
15003	Bentonite	Tonne	0.0030	₹ 3,220.00	₹ 9.66
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.020	₹ 34,000.00	₹ 680.00
0109	Hire and running charges of light crane.	Day	0.010	₹ 2,484.00	₹ 24.84
0106	Hire and running charges of bentonite pump.	Day	0.010	₹ 4,200.00	₹ 42.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.003	₹ 124.80	₹ 0.37
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.02	₹ 380.00	₹ 7.60
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	d. Water charges : (ex/c A)	1%	on	₹ 1,064.47	₹ 10.64
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 1,075.11	₹ 32.25
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 1,107.36	₹ 166.10
				Total	₹ 1,600.04
				Say,	₹ 1,600.00

15.5.2 400 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 bulb.	Each			
	a. Materials and T&P:				
	Bulb - 0.063 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	0.063	₹ 9,896.50	₹ 623.48
15003	Bentonite	Tonne	0.006	₹ 3,220.00	₹ 19.32
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.020	₹ 34,000.00	₹ 680.00
0109	Hire and running charges of light crane.	Day	0.010	₹ 2,484.00	₹ 24.84
0106	Hire and running charges of bentonite pump.	Day	0.01	₹ 4,200.00	₹ 42.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.006	₹ 124.80	₹ 0.75
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.02	₹ 380.00	₹ 7.60
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	d. Water charges : (ex/c A)	1%	on	₹ 1,074.51	₹ 10.75
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 1,085.26	₹ 32.56
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 1,117.82	₹ 167.67
				Total	₹ 1,908.97
				Say,	₹ 1,909.00

15.5.3 450 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 1 bulb.	Each			
	a. Materials and T&P:				
	Bulb - 0.081 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	0.081	₹ 9,896.50	₹ 801.62
15003	Bentonite	Tonne	0.008	₹ 3,220.00	₹ 25.76
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.02	₹ 34,000.00	₹ 680.00
0109	Hire and running charges of light crane.	Day	0.01	₹ 2,484.00	₹ 24.84
0106	Hire and running charges of bentonite pump.	Day	0.01	₹ 4,200.00	₹ 42.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.008	₹ 124.80	₹ 1.00
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.02	₹ 380.00	₹ 7.60
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	d. Water charges : (ex/c A)	1%	on	₹ 1,081.20	₹ 10.81
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 1,092.01	₹ 32.76
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 1,124.77	₹ 168.72
				Total	₹ 2,095.11
				Say,	₹ 2,095.10

15.5.4 500 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 bulb.	Each			
	a. Materials and T&P:				
	Bulb - 0.100 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	0.100	₹ 9,896.50	₹ 989.65
15003	Bentonite	Tonne	0.010	₹ 3,220.00	₹ 30.59
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.020	₹ 34,000.00	₹ 680.00
0109	Hire and running charges of light crane.	Day	0.010	₹ 2,484.00	₹ 24.84
0106	Hire and running charges of bentonite pump.	Day	0.015	₹ 4,200.00	₹ 63.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.010	₹ 124.80	₹ 1.19
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.02	₹ 380.00	₹ 7.60
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	d. Water charges : (ex/c A)	1%	on	₹ 1,107.22	₹ 11.07
	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 1,118.29	₹ 33.55
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 1,151.84	₹ 172.78
				Total	₹ 2,314.27
				Say,	₹ 2,314.30

15.5.5 550 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 bulb.	Each			
	a. Materials and T&P:				
	Bulb - 0.102 Cum				
	Rate as per item no. 5.31.1.1 SH. RCC Work	Cum	0.102	₹ 9,896.50	₹ 1,009.44
15003	Bentonite	Tonne	0.010	₹ 3,220.00	₹ 32.20
0108	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	Day	0.02	₹ 34,000.00	₹ 680.00
0109	Hire and running charges of light crane.	Day	0.01	₹ 2,484.00	₹ 24.84
0106	Hire and running charges of bentonite pump.	Day	0.02	₹ 4,200.00	₹ 84.00
	b. Carriage:				
	Concrete		Already included in item		
	Bentonite	Tonne	0.010	₹ 124.80	₹ 1.25
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.02	₹ 380.00	₹ 7.60
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	d. Water charges : (ex/c A)	1%	on	₹ 1,129.89	₹ 11.30

	e. Sundries & contingencies: (ex/c A)	3.0%	on	₹ 1,141.19	₹ 34.24
	f. Contractor's profit & overheads:(ex/c A)	15.0%	on	₹ 1,175.43	₹ 176.31
				Total	₹ 2,361.18
				Say,	₹ 2,361.20

- 15.6 Providing, driving (*with vibrating pile driving hammer complete with power units & accessories*) and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M25 cement concrete to carry safe working load not less than specified with a central through preformed hole with M.S. black pipe of dia. 40mm for grouting with cement sand grouting of mix 1:2 (1 cement : 2 fine sand) under sufficient positive pressure to ensure complete filling including centring, shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement as per specification & the direction of Engineer in-charge (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap):-

15.6.1 400 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete - $3.1428/4 \times (0.40)^2 \times 20 = 2.514$ Cum				
	SH. RCC Work (A) item no. [5.31.1.1+5.12.3-5.1.4]	Cum	2.514	₹ 13,777.00	₹ 34,635.38
	Cement mortar 1:2 item for grout (A) item no. [3.1.2]	Cum	0.025	₹ 5,011.28	₹ 125.28
15001	C.I. Shoes @ 80 kg per pile	Kg.	80.00	₹ 59.00	₹ 4,720.00
15002	M.S. Clamp @ 35 kg per pile	Kg.	35.00	₹ 52.00	₹ 1,820.00
0112	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories .	Day	0.38	₹ 35,000.00	₹ 13,300.00
0107	Hire and running charges of crane 20 tonne	Day	0.06	₹ 10,091.00	₹ 605.46
	b. Carriage:				
	Concrete		Already included in item		
	C.I. Shoes @ 80 kg per pile	Tonne	0.080	₹ 110.94	₹ 8.88
	M.S. clamp @ 35 kg per pile	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	d. Water charges : (ex/c A)	1%	on	₹ 21,529.10	₹ 215.29
	e. Sundries & contingencies: (ex/c A)	3.00%	on	₹ 21,744.39	₹ 652.33
	f. Contractor's profit & overheads:(ex/c A)	15.00%	on	₹ 22,396.72	₹ 3,359.51
				Total	₹ 60,391.61
	Total cost for 1 Mtr.				₹ 3,019.58
				Say,	₹ 3,019.60

15.6.2 450 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete - $3.1428/4 \times (0.450)^2 \times 20 = 3.182$ Cum				
	SH. RCC Work (A) item no. [5.31.1.1+5.12.3-5.1.4]	Cum	3.182	₹ 13,777.00	₹ 43,838.41
	Cement mortar 1:2 item for grout (A) item no. [3.1.2]	cum	0.025	₹ 5,011.28	₹ 125.28
15001	C.I. Shoes @ 80 kg per pile	Kg.	80.00	₹ 59.00	₹ 4,720.00
15002	M.S. Clamp @ 35 kg per pile	Kg.	35.00	₹ 52.00	₹ 1,820.00
0112	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories .	Day	0.38	₹ 35,000.00	₹ 13,300.00
0107	Hire and running charges of crane 20 tonne	Day	0.06	₹ 10,091.00	₹ 605.46
	b. Carriage:				
	Concrete		Already included in item		
	C.I. Shoes @ 80 kg per pile	Tonne	0.080	₹ 110.94	₹ 8.88
	M.S. Clamp @ 35 kg per pile	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	d. Water charges : (ex/c A)	1%	on	₹ 21,529.10	₹ 215.29
	e. Sundries & contingencies: (ex/c A)	3.00%	on	₹ 21,744.39	₹ 652.33
	f. Contractor's profit & overheads:(ex/c A)	15.00%	on	₹ 22,396.72	₹ 3,359.51

				Total	₹ 69,594.64
	Total cost for 1 Mtr.				₹ 3,479.73
				Say,	₹ 3,479.70

15.6.3 500 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete - $3.1428/4 \times (0.50)^2 \times 20 = 3.928$ Cum				
	SH. RCC Work (A) item no. [5.31.1.1+5.12.3-5.1.4]	Cum	3.928	₹ 13,777.00	₹ 54,116.06
	Cement mortar 1:2 item for grout (A) item no. [3.1.2]	Cum	0.025	₹ 5,011.28	₹ 125.28
15001	C.I. Shoes @ 80 kg per pile	Kg.	80.00	₹ 59.00	₹ 4,720.00
15002	M.S. Clamp @ 35 kg per pile	Kg.	35.00	₹ 52.00	₹ 1,820.00
0112	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories .	Day	0.38	₹ 35,000.00	₹ 13,300.00
0107	Hire and running charges of crane 20 tonne	Day	0.06	₹ 10,091.00	₹ 605.46
	b. Carriage:				
	Concrete		Already included in item		
	C.I. Shoes @ 80 kg per pile	Tonne	0.080	₹ 110.94	₹ 8.88
	M.S. Clamp @ 35 kg per pile	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	d. Water charges : (ex/c A)	1%	on	₹ 21,529.10	₹ 215.29
	e. Sundries & contingencies: (ex/c A)	3.00%	on	₹ 21,744.39	₹ 652.33
	f. Contractor's profit & overheads:(ex/c A)	15.00%	on	₹ 22,396.72	₹ 3,359.51
				Total	₹ 79,872.29
	Total cost for 1 Mtr.				₹ 3,993.61
				Say,	₹ 3,993.60

15.6.4 550 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete - $3.1428/4 \times (0.55)^2 \times 20 = 4.753$ Cum				
	SH. RCC Work (A) item no. [5.31.1.1+5.12.3-5.1.4]	Cum	4.753	₹ 13,777.00	₹ 65,482.08
	Cement mortar 1:2 item for grout (A) item no. [3.1.2]	Cum	0.025	₹ 5,011.28	₹ 125.28
15001	C.I. Shoes @ 80 kg per pile	Kg.	80.00	₹ 59.00	₹ 4,720.00
15002	M.S. Clamp @ 35 kg per pile	Kg.	35.00	₹ 52.00	₹ 1,820.00
0112	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories .	Day	0.38	₹ 35,000.00	₹ 13,300.00
0107	Hire and running charges of crane 20 tonne	Day	0.06	₹ 10,091.00	₹ 605.46
	b. Carriage:				
	Concrete		Already included in item		
	C.I. Shoes @ 80 kg per pile	Tonne	0.080	₹ 110.94	₹ 8.88
	M.S. Clamp @ 35 kg per pile	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	d. Water charges : (ex/c A)	1%	on	₹ 21,529.10	₹ 215.29
	e. Sundries & contingencies: (ex/c A)	3.00%	on	₹ 21,744.39	₹ 652.33
	f. Contractor's profit & overheads:(ex/c A)	15.00%	on	₹ 22,396.72	₹ 3,359.51
				Total	₹ 91,238.31
	Total cost for 1 Mtr.				₹ 4,561.92
				Say,	₹ 4,561.90

15.6.5 600 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete $3.1428 / 4 \times 0.60^2 \times 20 = 5.652$ Cum				
	SH. RCC Work (A) item no. [5.31.1.1+5.12.3-5.1.4]	Cum	5.652	₹ 13,777.00	₹ 77,867.60
	Cement mortar 1:2 item for grout (A) item no. [3.1.2]	Cum	0.025	₹ 5,011.28	₹ 125.28

15001	C.I. Shoes @ 80 kg per pile	Kg.	80.00	₹ 59.00	₹ 4,720.00
15002	M.S. Clamp @ 35 kg per pile	Kg.	35.00	₹ 52.00	₹ 1,820.00
0112	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories .	Day	0.38	₹ 35,000.00	₹ 13,300.00
0107	Hire and running charges of crane 20 tonne	Day	0.06	₹ 10,091.00	₹ 605.46
	b. Carriage:				
	Concrete		Already included in item		
	C.I. Shoes @ 80 kg per pile	Tonne	0.080	₹ 110.94	₹ 8.88
	M.S. Clamp @ 35 kg per pile	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	d. Water charges : (ex/c A)	1%	on	₹ 21,529.10	₹ 215.29
	e. Sundries & contingencies: (ex/c A)	3.00%	on	₹ 21,744.39	₹ 652.33
	f. Contractor's profit & overheads:(ex/c A)	15.00%	on	₹ 22,396.72	₹ 3,359.51
				Total	₹ 103,623.83
	Total cost for 1 Mtr.				₹ 5,181.19
				Say,	₹ 5,181.20

15.6.6 750 mm dia piles.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for =20 Mtr.	Mtr.			
	a. Materials and T&P:				
	Concrete 3.1428 /4x0.75 ² x20 = 8.836 Cum				
	SH. RCC Work (A) item no. [5.31.1.1+5.12.3-5.1.4]	Cum	8.836	₹ 13,777.00	₹ 121,733.57
	Cement mortar 1:2 item for grout (A) item no. [3.1.2]	Cum	0.025	₹ 5,011.28	₹ 125.28
15001	C.I. Shoes @ 80 kg per pile	Kg.	80.00	₹ 59.00	₹ 4,720.00
15002	M.S. Clamp @ 35 kg per pile	Kg.	35.00	₹ 52.00	₹ 1,820.00
0112	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories .	Day	0.38	₹ 35,000.00	₹ 13,300.00
0107	Hire and running charges of crane 20 tonne	Day	0.06	₹ 10,091.00	₹ 605.46
	b. Carriage:				
	Concrete		Already included in item		
	C.I. Shoes @ 80 kg per pile	Tonne	0.080	₹ 110.94	₹ 8.88
	M.S. Clamp @ 35 kg per pile	Tonne	0.035	₹ 110.94	₹ 3.88
	c. Labours:				
0225	Work supervisor/ mistri	Day	0.12	₹ 380.00	₹ 45.60
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	d. Water charges : (ex/c A)	1%	on	₹ 21,529.10	₹ 215.29
	e. Sundries & contingencies: (ex/c A)	3.00%	on	₹ 21,744.39	₹ 652.33
	f. Contractor's profit & overheads:(ex/c A)	15.00%	on	₹ 22,396.72	₹ 3,359.51
				Total	₹ 147,489.80
	Total cost for 1 Mtr.				₹ 9,832.65
				Say,	₹ 9,832.70

15.7 Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge:-

Note: 1. Initial and Routine Load Test shall be carried out by Dynamic Method of Testing

Note: 2. Testing agency shall submit the design of loading platform for the approval of Engineer-in-Charge.

15.7.1 Single pile upto 50 tonne safe capacity

15.7.1.1 Initial test (Test Load 2.5 times the safe Capacity).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				

15004	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and up to 50 tonne capacity pile.	Per test	1.00	₹ 29,250.00	₹ 29,250.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 29,250.00	₹ 292.50
	e. Sundries & contingencies:	3.0%	on	₹ 29,542.50	₹ 886.28
	f. Contractor's profit & overheads:	15.0%	on	₹ 30,428.78	₹ 4,564.32
	Total cost for 1 No. Test			Total	₹ 34,993.10
				Say,	₹ 34,993.10

15.7.1.2 Routine test (Test Load 1.5 times the safe Capacity).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15007	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile up to 50 tonne capacity.	Per test	1.00	₹ 14,985.00	₹ 14,985.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 14,985.00	₹ 149.85
	e. Sundries & contingencies:	3.0%	on	₹ 15,134.85	₹ 454.05
	f. Contractor's profit & overheads:	15.0%	on	₹ 15,588.90	₹ 2,338.34
	Total cost for 1 No. Test			Total	₹ 17,927.24
				Say,	₹ 17,927.20

15.7.2 Single pile above 50 tonne and upto 100 tonne safe capacity pile:-

15.7.2.1 Initial test (Test Load 2.5 times the safe Capacity).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15005	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & above 50 tonne and up to 100 tonne	Per test	1.00	₹ 39,000.00	₹ 39,000.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 39,000.00	₹ 390.00
	e. Sundries & contingencies:	3.0%	on	₹ 39,390.00	₹ 1,181.70
	f. Contractor's profit & overheads:	15.0%	on	₹ 40,571.70	₹ 6,085.76
	Total cost for 1 No. Test			Total	₹ 46,657.46
				Say,	₹ 46,657.50

15.7.2.2 Routine test (Test Load 1.5 times the safe Capacity).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15008	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile.	Per test	1.00	₹ 23,865.00	₹ 23,865.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 23,865.00	₹ 238.65
	e. Sundries & contingencies:	3.0%	on	₹ 24,103.65	₹ 723.11
	f. Contractor's profit & overheads:	15.0%	on	₹ 24,826.76	₹ 3,724.01
	Total cost for 1 No. Test			Total	₹ 28,550.77

			Say,	₹ 28,550.80

15.7.3 Group of two or more piles upto 50 tonne safe capacity

15.7.3.1 Initial test (Test Load 2.5 times the safe Capacity).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15006	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & group of two or more up to 50 tonne	Per test	1.00	₹ 48,950.00	₹ 48,950.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 48,950.00	₹ 489.50
	e. Sundries & contingencies:	3.0%	on	₹ 49,439.50	₹ 1,483.19
	f. Contractor's profit & overheads:	15.0%	on	₹ 50,922.69	₹ 7,638.40
	Total cost for 1 No. Test			Total	₹ 58,561.09
				Say,	₹ 58,561.10

15.7.3.2 Routine test (Test Load 1.5 times the safe Capacity).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15009	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part- IV) including preparation of pile head etc. for Group of two piles up to 50 tonne capacity each.	Per test	1.00	₹ 29,970.00	₹ 29,970.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 29,970.00	₹ 299.70
	e. Sundries & contingencies:	3.0%	on	₹ 30,269.70	₹ 908.09
	f. Contractor's profit & overheads:	15.0%	on	₹ 31,177.79	₹ 4,676.67
	Total cost for 1 No. Test			Total	₹ 35,854.46
				Say,	₹ 35,854.50

15.8 Cyclic vertical load testing of pile in accordance with IS Code of practice IS: 2911 (part IV) by Kentledge method including preparation of pile head etc. for.

15.8.1 Single Pile:-

15.8.1.1 Upto 50 tonne Safe capacity pile.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15007	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile up to 50 tonne capacity.	Per test	1.00	₹ 14,985.00	₹ 14,985.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 14,985.00	₹ 149.85
	e. Sundries & contingencies:	3.0%	on	₹ 15,134.85	₹ 454.05
	f. Contractor's profit & overheads:	15.0%	on	₹ 15,588.90	₹ 2,338.34
	Total cost for 1 No. Test			Total	₹ 17,927.24
				Say,	₹ 17,927.20

15.8.1.2 Above 50 tonne and upto 100 tonne Safe capacity pile.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				

15008	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile.	Per test	1.00	₹ 23,865.00	₹ 23,865.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 23,865.00	₹ 238.65
	e. Sundries & contingencies:	3.0%	on	₹ 24,103.65	₹ 723.11
	f. Contractor's profit & overheads:	15.0%	on	₹ 24,826.76	₹ 3,724.01
	Total cost for 1 No. Test			Total	₹ 28,550.77
				Say,	₹ 28,550.80

15.8.2 Group of two or more piles:-

15.8.2.1 Upto 400 tonne safe capacity pile of group

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15009	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part- IV) including preparation of pile head etc. for Group of two piles up to 50 tonne capacity each.	Per test	1.00	₹ 29,970.00	₹ 29,970.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 29,970.00	₹ 299.70
	e. Sundries & contingencies:	3.0%	on	₹ 30,269.70	₹ 908.09
	f. Contractor's profit & overheads:	15.0%	on	₹ 31,177.79	₹ 4,676.67
	Total cost for 1 No. Test			Total	₹ 35,854.46
				Say,	₹ 35,854.50

15.9 Lateral load testing of single pile in accordance with IS Code of practice IS : 2911 (Part IV) for determining safe allowable lateral load on pile as per specification & the direction of Engineer in-charge :-

15.9.1 Upto 50 tonne capacity pile.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15010	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile up to 50 tonne capacity.	Per test	1.00	₹ 14,985.00	₹ 14,985.00
	b. Carriage:				
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 14,985.00	₹ 149.85
	e. Sundries & contingencies:	3.0%	on	₹ 15,134.85	₹ 454.05
	f. Contractor's profit & overheads:	15.0%	on	₹ 15,588.90	₹ 2,338.34
	Total cost for 1 No. Test			Total	₹ 17,927.24
				Say,	₹ 17,927.20

15.9.2 Above 50 tonne and upto 100 tonne capacity pile.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
15011	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile above 50 tonne capacity.	Per test	1.00	₹ 23,865.00	₹ 23,865.00
	c. Labours:				
	d. Water charges:	1.0%	on	₹ 23,865.00	₹ 238.65
	e. Sundries & contingencies:	3.0%	on	₹ 24,103.65	₹ 723.11
	f. Contractor's profit & overheads:	15.0%	on	₹ 24,826.76	₹ 3,724.01
	Total cost for 1 No. Test			Total	₹ 28,550.77
				Say,	₹ 28,550.80

- 15.10 Integrity testing of Pile using Low Strain / Sonic Integrity / Sonic Echo Test method in accordance with IS 14893 including surface preparation of pile top by removing soil, mud, dust and chipping lean concrete lumps etc. and use of computerised equipment and high skill trained personal for conducting the test and submission of results, all complete as per direction of Engineering-in-Charge.**

Note: The inclusion of the above item in the schedule of work shall judiciously decided by the technical sanctioning authority, keeping in view the quality control, type of soil strata and importance of the project.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 test	Each			
	a. Materials/ Test:				
0133	Pile integrity testing equipment	day	0.10	₹ 3,000.00	₹ 300.00
	b. Labours:				
0233	Technician	day	0.10	₹ 700.00	₹ 70.00
0212	Helper	day	0.10	₹ 300.00	₹ 30.00
					₹ 400.00
	c. Water charges:	1.0%	on	₹ 400.00	₹ 4.00
	d. Sundries & contingencies [Reporting charges, Transportation & consumables etc.].	3.0%	on	₹ 404.00	₹ 12.12
	e. Contractor's profit & overheads:	15.0%	on	₹ 416.12	₹ 62.42
	Total cost for 1 No. Test			Total	₹ 878.54
				Say,	₹ 878.50

S U B - H E A D - 1 6



A L U M I N I U M W O R K & S T R U C T U R A L G L A Z I N G

SUB HEAD : 16.0 / ALUMINIUM WORK & STRUCTURAL GLAZING
BASIC RATES

Code No	Description	Unit	Rate
0201	Bandhani	Day	₹ 300.00
0209	Carpenter 1st class	Day	₹ 425.00
0210	Carpenter 2nd class	Day	₹ 380.00
0203	Beldar	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0217	Glazier	Day	₹ 380.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0224	Mate	Day	₹ 300.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	₹ 380.00
0218*	Mason (average)	Day	₹ 400.00
0212	Helper	Day	₹ 300.00
08056	Chromium plated Brass screws 20 mm	100 Nos	₹ 108.00
11021	Galvanised steel plain sheets	quintal	₹ 5,440.00
08146	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	₹ 360.00
08147	Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm).	sqm	₹ 535.00
08291	Float glass sheet of nominal thickness 8 mm.(weight not less than 20 kg/sqm).	sqm	₹ 680.00
10006	Aluminium Strip 40 mm wide and 2 mm thick	Kg	₹ 230.00
08166	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	₹ 295.00
08169	Dash fastener/ Chemical fastener	each	₹ 30.00
05050	Rawl plug 50 mm (designation 10 no.)	each	₹ 7.00
16001	Aluminium T or L sections	kilogram	₹ 220.00
08202	Expandable fastener with plastic sleeve and M.S. screws. 32 mm long	each	₹ 12.00
16014	Cadmium plated full threaded steel screws (30x4 mm dia.)	100 Nos	₹ 35.00
16011	Aluminium washer 2 mm thick 15 mm dia	100 Nos	₹ 11.00
16015	Dash hold fastener 12.5 mm dia, 50 mm long with 6 mm dia bolt	each	₹ 60.00
16012	Anodising 15 microns on aluminium sections	kilogram	₹ 40.00
16020	Neoprene/EPDM rubber gasket	metre	₹ 30.00
16013	Anodising 25 microns on aluminium sections	kilogram	₹ 50.00
16022	Powder coating 50 microns on aluminium sections.	kilogram	₹ 64.00
16021	Polyester powder coating 50 microns on aluminium sections	kilogram	₹ 70.00

Code No	Description	Unit	Rate
16017	Double action hydraulic floor spring with stainless steel cover plate	each	₹ 1,650.00
16002	6 mm dia. G.I. adjustable hangers including clips (up to 1.2 m length)	each	₹ 33.00
16016	Double action hydraulic floor spring with brass cover plate	each	₹ 1,780.00
08215	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	₹ 785.00
08218	Prelaminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	₹ 815.00
16023	Silicon sealant.	cartridge	₹ 350.00
16024	Stainless steal screws 30mm x4mm.	cent	₹ 38.00
16018	Hermetically sealed double glazed unit made with 6mm thick clear float glass both side having 12 mm air gap.	sqm	₹ 2,200.00
16026	Stainless steel (SS 304 grade) adjustable friction window stay. 205 x19mm	each	₹ 200.00
16025	Stainless steel (SS 304 grade) adjustable friction window stay 255 x19mm	each	₹ 235.00
16027	Stainless steel (SS 304 grade) adjustable friction window stay. 355 x19mm	each	₹ 295.00
16028	Stainless steel (SS 304 grade) adjustable friction window stay. 510 x19mm	each	₹ 530.00
16029	Stainless steel (SS 304 grade) adjustable friction window stay. 710 x19mm	each	₹ 935.00
16019	Masking tape.	metre	₹ 3.00
16003	Aluminium casement window fastener (Anodised AC 15)	each	₹ 42.00
16005	Aluminium casement window fastener (powder coated).	each	₹ 46.00
16004	Aluminium casement window fastener (polyester powder coated).	each	₹ 50.00
16006	Aluminium round shape handle (anodised AC 15)	each	₹ 53.00
16008	Aluminium round shape handle (powder coated)	each	₹ 57.00
16007	Aluminium round shape handle (polyester powder coated).	each	₹ 66.00
16030	Stainless steel screws 25mm x4mm	cent	₹ 42.00
08107	Anodised Aluminium butt hinges 100 x 75 x 4 mm size	10 Nos.	₹ 630.00
16031	Stainless steel dash fastener of 8 mm dia and 75 mm long bolt	each	₹ 14.00
16032	Aluminium Grill	kg	₹ 255.00

Code No	Description	Unit	Rate
16033	Toughened glass 12 mm thickness	sqm	₹ 1,900.00
16034	Structural sealant	metre	₹ 33.00
16035	Spacer tape 6.4 mm thick x 6 mm wide	metre	₹ 22.00
16036	Weather Sealant - Non Staining (600 ml)	each	₹ 465.00
16037	Weather Sealant - Normal (300 ml)	each	₹ 162.00
16038	MS Brackets / Aluminium Alloy Brackets	kg	₹ 110.00
16039	Silicon gasket in kg (above 50 g/m)	kg	₹ 600.00
16040	EPDM gasket in kg (above 60 g/m)	kg	₹ 165.00
16041	Anchor Fastner - M10	each	₹ 12.00
16042	SS Bolt with washer of sizes for structural glazing / ACP cladding	each	₹ 39.00
16043	SS Screws of sizes for structural glazing / ACP cladding	each	₹ 5.00
16044	Protective Tape	metre	₹ 22.00
16045	GI flashing - 1.2 mm Thick	kg	₹ 65.00
16046	6 mm thick High performance glass	sqm	₹ 1,985.00
16047	6 mm thick clear heat strengthened glass	sqm	₹ 685.00
16048	6 mm thick clear heat strengthened glass	each	₹ 135.00
16049	ARMS GS HD- Top Hung - 20" - Type P - Couple	pair	₹ 1,705.00
16050	Connection Block or vision glass panel	each	₹ 42.00
16051	Curtain wall striker for vision glass panel	each	₹ 110.00
16052	Adjustable fastening pawl for vision glass panel	each	₹ 42.00
16053	Corner drive for vision glass panel	each	₹ 320.00
16054	Top wedge block for vision glass panel	each	₹ 148.00
16055	Glass wool of density @ 48 kg / cum with black glass tissue (BGT)	sqm	₹ 253.00
16056	SS Screws - #8 x 19	each	₹ 11.00
16057	Weather Sealant - DC 789	cartridge	₹ 143.00
16058	Cement Board	sqm	₹ 275.00
16059	Baker rod	metre	₹ 5.50
16060	4 mm thick ACP	sqm	₹ 1,100.00
16061	3 mm thick ACP	sqm	₹ 865.00
16062	Fire stop	metre	₹ 585.00
16063	GI / Aluminium Sheet (0.8 mm thick)	kg	₹ 50.00
16064	4 point façade glass bracket without flat head bolts	each	₹ 3,540.00

Code No	Description	Unit	Rate
16065	2 point façade glass bracket (wall mounted without flat head bolts)	each	₹ 1,775.00
16066	1 point façade glass bracket (wall mounted without flat head bolts)	each	₹ 1,390.00
16067	Flate head bolt for brackets of spider glazing	each	₹ 690.00
16068	400 mm long fin plate without fastners	pair	₹ 6,345.00
16069	Stainless steel U Channel of size (50x25x2mm)	metre	₹ 153.00
16070	Non staining water resistant clear silicon	metre	₹ 64.00
16071	21mm thick clear toughened Laminated glass for fins with holes	sqm	₹ 6,400.00

Sub Head : 16.0
Aluminium Work

- 1 Description of items has been given very briefly. Relevant clauses of CPWD-Specifications may be referred for quality, sampling and tests etc.
- 2 Manual mixing of cement mortars have been considered here. However, for using of mechanical mixer, the cost will differ with manual mixing as per item no.3.17.
- 3 Sand can be either coarse or fine as required/available. Here, provision of fine sand is considered only due to non-availability of coarse sand in Tripura. However, if design dictates for use of coarse sand, then separate analysis may be made as per site condition.
- 4 Rates of all materials used in the analysis are at the site of work which is including the cost for loading, unloading and haulage.

16.1 Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS : 1285, fixing with dash fasteners of required dia and size, including necessary filling up of gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawing and the direction of Engineer-in-charge. (Glazing and paneling and dash fasteners to be paid for separately) :-

16.1.1 For fixed portion of approved quality:-

16.1.1.1 Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 42.02 Kg.	Kg.			
	a. Materials:				
	Aluminium T or L sections:				
	External member of the frame (Jindal section No. 4605) V = 2x2.4 = 4.80 m H = 2x3x0.95 = 5.70 m = 10.50 m @ 1.653 kg/m = 17.36 kg.				
	Internal member of the frame (Jindal section no. 4604) V = 2x2.40 = 4.80 M H = 1x3x0.95 = 2.85 m = 7.65 m @ 1.692 kg/m = 12.94 kg				
16001	Aluminium sap beading on both side (Jindal section No. 4407) 2x6x2 (1.14+0.95) = 50.16 m Snap beading = 50.16 m @0.176 kg/m = 8.33kg Angle cleat 38x38x4.8 mm 50 mm long 18x0.05 = 0.90m @ 0.985 kg/m = 0.89 kg Sub total = 40.02 kg add 5% wastage = 2.00 kg. Total = 42.02 kg.	Kg.	42.02	220.00	9244.40
08056	CP brass/ Stainless steel screws 20mm for cleat angle: 18x4	100 Nos.	72	108.00	77.76
16012	Anodising 15 microns on aluminium sections.	Kg.	42.02	40.00	1680.80
	b. Carriage:				
	Carriage of material	Kg.	42.02	0.11	4.62
	c. Labours (for fabrication of frame):				
0215	Fitter (Grade I)	Day	2.00	380.00	760.00
0228	Beldar (Special)	Day	1.00	380.00	380.00
0203	Beldar	Day	1.00	300.00	300.00
0201	Bandhani	Day	0.05	300.00	15.00
					<u>12462.58</u>
	d. Labour for drilling holes, hire charges of drill, electricity charges, carriage of screws & sundries	2%	on	12462.58	249.25
	e. Water charges : @ 0.50%	0.50%	on	12711.83	63.56
	f. Contractor's profit & overheads: @ 15%	15%	on	12775.39	1916.31
				Total	14691.70
			Total cost for 1 Kg.		367.11
				Say,	367.10

16.1.1.2 Powder coated aluminium (minimum thickness of powder coating of 50 micron).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 40.02 Kg.	Kg.			
	a. Materials:				
	Aluminium T or L sections:				
	External member of the frame (Jindal section No. 4605)				
	V = 2x2.4 = 4.80 m H = 2x3x0.95 = 5.70 m = 10.50 m @				
	1.653 kg/m = 17.36 kg.				
	Internal member of the frame (Jindal section no. 4604)				
	V = 2x2.40 = 4.80 M H = 1x3x0.95 = 2.85 m = 7.65 m @				
	1.692 kg/m = 12.94 kg				
16001	Aluminium sap beading on both side (Jindal section No. 4407) 2x6x2 (1.14+0.95) = 50.16 m Snap beading = 50.16 m @0.176 kg/m = 8.33kg	Kg.	42.02	220.00	9244.40
	Angle cleat 38x38x4.8 mm 50 mm long 18x0.05 = 0.90m @ 0.985 kg/m = 0.89 kg				
	Sub total = 40.02 kg add 5% wastage = 2.00 kg.				
	Total = 42.02 kg.				
08056	CP brass/ Stainless steel screws 20mm for cleat angle: 18x4	100Nos.	72	108.00	77.76
16022	Expoxy powder coating 50micron on aluminium sections.	Kg.	42.02	64.00	2689.28
	b. Carriage:				
	Carriage of material	Kg.	42.02	0.11	4.62
	c. Labours (for fabrication of frame):				
0215	Fitter (Grade I)	Day	2.00	380.00	760.00
0228	Beldar (Special)	Day	1.00	380.00	380.00
0203	Beldar	Day	1.00	300.00	300.00
0201	Bandhani	Day	0.05	300.00	15.00
					13471.06
	d. Labour for drilling holes, hire charges of drill, electricity charges, carriage of screws& sundries	2%	on	13471.06	269.42
	e. Water charges : @ 0.50%	0.50%	on	13740.48	68.70
	f. Contractor's profit & overheads: @ 15%	15%	on	13809.18	2071.38
				Total	15880.56
		Total			396.82
				Say,	396.80

16.1.1.3 Polyester powder coated aluminium (minimum thickness of polyester powder coating of 50 micron).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 40.02 Kg.	Kg.			
	a. Materials:				
	Aluminium T or L sections:				
	External member of the frame (Jindal section No. 4605)				
	V = 2x2.4 = 4.80 m H = 2x3x0.95 = 5.70 m = 10.50 m @				
	1.653 kg/m = 17.36 kg.				
	Internal member of the frame (Jindal section no. 4604)				
	V = 2x2.40 = 4.80 M H = 1x3x0.95 = 2.85 m = 7.65 m @				
	1.692 kg/m = 12.94 kg				
16001	Aluminium sap beading on both side (Jindal section No. 4407) 2x6x2 (1.14+0.95) = 50.16 m Snap beading = 50.16 m @0.176 kg/m = 8.33kg	Kg.	42.02	220.00	9244.40
	Angle cleat 38x38x4.8 mm 50 mm long 18x0.05 = 0.90m @ 0.985 kg/m = 0.89 kg				
	Sub total = 40.02 kg add 5% wastage = 2.00 kg.				
	Total = 42.02 kg.				
08056	CP brass/ Stainless steel screws 20mm for cleat angle: 18x4	100Nos.	72	108.00	77.76
16021	Polyester powder coating 50 microns on aluminium sections.	Kg.	42.02	70.00	2941.40
	b. Carriage:				
	Carriage of material	Kg.	42.02	0.11	4.62

c. Labours (for fabrication of frame):					
0215	Fitter (Grade I)	Day	2.00	380.00	760.00
0228	Beldar (Special)	Day	1.00	380.00	380.00
0203	Beldar	Day	1.00	300.00	300.00
0201	Bandhani	Day	0.05	300.00	15.00
					<u>13723.18</u>
d. Labour for drilling holes, hire charges of drill, electricity charges, carriage of screws & sundries		2%	on	13723.18	274.46
e. Water charges : @ 0.50%		0.50%	on	13997.64	69.99
f. Contractor's profit & overheads: @ 15%		15%	on	14067.63	2110.14
Total					16177.77
Total cost for 1 Kg.					404.24
Say,					404.20

16.1.2 For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately):-

16.1.2.1 Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15).

Code	Description	Unit	Quantity	Rate	Amount
Details of cost for 20.21 Kg.					
a. Materials:					
Aluminium sections:					
Hanging style (Jindal section no 4524) 1x2.35 = 2.35 m					
@2.53kg/m = 5.95 kg					
Meeting style (Jindal section no 4526) 1 x2.35 = 2.35 m					
@2.456 kg/m = 5.79 kg					
Top & bottom rail (Jindal section no 4510) 2x0.75 = 1.50 m @2.48 kg/m =3.72 kg					
Lock rail (Jindal section no 4524) 1x0.75 = 0.75 m @ 2.53 kg/m = 1.90 kg					
16001	Glazing plate (Jindal section no 440) on one side of lock rail 1 x 0.75 = 0.75 m @ 0.459 kg/m = 0.34 kg	Kg.	21.65	220.00	4763.00
Aluminium snap beading (Jindal section no 4497) on both side 2x2x(0.75+1.26) = 8.04 m x 2x2x(0.75+0.81) = 6.24 m = 14.28 m @ 0.176 kg/m = 2.51 kg					
Aluminium angle cleat 38x38x4.8 mm 35 mm long 3x4x0.035 = 0.42 m @ 0.985 kg/m = 0.41 kg					
Sub total = 20.62 kg Add 5% wastage = 1.03 kg					
Total = 21.65 kg					
08056	CP brass/ Stainless steel screws 20mm for cleat 12x4 = 48 For cleat 4 x8 = 32 For glazing plate @15 cm c/c in 75 cm length 2x6 = 12 Total = 92 Nos.	100Nos.	92	108.00	99.36
08107	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos.	4	630.00	252.00
16012	Anodising 15 microns on aluminium sections.	Kg.	21.65	40.00	866.00
16020	Neoprene / EPDM gasket in groove of meeting style	metre	2.35	30.00	70.50
b. Carriage:					
Carriage of material		Kg.	31.20	0.11	3.43
c. Labours (for fabrication of frame):					
0215	Fitter (Grade I)	Day	1.00	380.00	380.00
0228	Beldar (Special)	Day	1.00	380.00	380.00
0203	Beldar	Day	0.50	300.00	150.00
0201	Bandhani	Day	0.40	300.00	120.00
Labours (for fixing the shutter including hinges):					
0209	Carpenter 1st class	Day	0.20	425.00	85.00
0203	Belder	Day	0.50	300.00	150.00
					<u>7319.29</u>
d. Labour for drilling holes, hire charges of drill, electricity charges, carriage of screws & sundries		2%	on	7319.29	146.39

e. Water charges : @ 0.50%	0.50%	on	7465.68	37.33
f. Contractor's profit & overheads: @ 15%	15%	on	7503.01	1125.45
			Total	8628.46
			Total cost for 1 Kg.	426.94
			Say,	426.90

16.1.2.2 Powder coated aluminium (minimum thickness of powder coating of 50 micron).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20.21 Kg.	Kg.			
	a. Materials:				
	Aluminium sections:				
	Hanging style (Jindal section no 4524) 1x2.35 = 2.35 m				
	@2.53kg/m = 5.95 kg				
	Meeting style (Jindal section no 4526) 1 x2.35 = 2.35 m				
	@2.456 kg/m = 5.79 kg				
	Top & bottom rail (Jindal section no 4510) 2x0.75 =				
	1.50 m @2.48 kg/m =3.72 kg				
	Lock rail (Jindal section no 4524) 1x0.75 = 0.75 m @				
16001	2.53 kg/m = 1.90 kg	Kg.	21.65	220.00	4763.00
	Glazing plate (Jindal section no 440) on one side of				
	lock rail 1 x 0.75 = 0.75 m @ 0.459 kg/m = 0.34 kg				
	Aluminium snap beading (Jindal section no 4497) on				
	both side 2x2x(0.75+1.26) = 8.04 m x 2x2x(0.75+0.81) =				
	6.24 m = 14.28 m @ 0.176 kg/m = 2.51 kg				
	Aluminium angle cleat 38x38x4.8 mm 35 mm long				
	3x4x0.035 = 0.42 m @ 0.985 kg/m = 0.41 kg				
	Sub total = 20.62 kg Add 5% wastage = 1.03 kg				
	Total = 21.65 kg				
08056	CP brass/ Stainless steel screws 20mm for cleat 12x4 =				
	48 For cleat 4 x8 = 32 For glazing plate @15 cm c/c in	100Nos.	92	108.00	99.36
	75 cm length 2x6 = 12 Total = 92 Nos.				
08107	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos.	4	630.00	252.00
16022	Expoxy powder coating 50micron on aluminium	Kg.	21.65	64.00	1385.60
	sections.				
16020	Neoprene / EPDM gasket in groove of meeting style	metre	2.35	30.00	70.50
	b. Carriage:			0.00	
	Carriage of material	Kg.	31.20	0.11	3.43
	c. Labours (for fabrication of frame):			0.00	
0215	Fitter (Grade I)	Day	1.00	380.00	380.00
0228	Beldar (Special)	Day	1.00	380.00	380.00
0203	Beldar	Day	0.50	300.00	150.00
0201	Bandhani	Day	0.40	300.00	120.00
	Labours (for fixing the shutter including hinges):				
0209	Carpenter 1st class	Day	0.20	425.00	85.00
0203	Belder	Day	0.50	300.00	150.00
					<u>7838.89</u>
	d. Labour for drilling holes, hire charges of drill,				
	electricity charges, carriage of screws & sundries	2%	on	7838.89	156.78
	e. Water charges : @ 0.50%	0.50%	on	7995.67	39.98
	f. Contractor's profit & overheads: @ 15%	15%	on	8035.65	1205.35
				Total	9241.00
				Total cost for 1 Kg.	457.25
				Say,	457.30

16.1.2.3 Polyester powder coated aluminium (minimum thickness of polyester powder coating of 50 micron).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20.21 Kg.	Kg.			
	a. Materials:				
	Aluminium sections:				
	Hanging style (Jindal section no 4524) 1x2.35 = 2.35 m				
	@2.53kg/m = 5.95 kg				
	Meeting style (Jindal section no 4526) 1 x2.35 = 2.35 m				
	@2.456 kg/m = 5.79 kg				
	Top & bottom rail (Jindal section no 4510) 2x0.75 = 1.50 m @2.48 kg/m =3.72 kg				
	Lock rail (Jindal section no 4524) 1x0.75 = 0.75 m @ 2.53 kg/m = 1.90 kg				
16001	Glazing plate (Jindal section no 440) on one side of lock rail 1 x 0.75 = 0.75 m @ 0.459 kg/m = 0.34 kg	Kg.	21.65	220.00	4763.00
	Aluminium snap beading (Jindal section no 4497) on both side 2x2x(0.75+1.26) = 8.04 m x 2x2x(0.75+0.81) = 6.24 m = 14.28 m @ 0.176 kg/m = 2.51 kg				
	Aluminium angle cleat 38x38x4.8 mm 35 mm long 3x4x0.035 = 0.42 m @ 0.985 kg/m = 0.41 kg				
	Sub total = 20.62 kg Add 5% wastage = 1.03 kg				
	Total = 21.65 kg				
08056	CP brass/ Stainless steel screws 20mm for cleat 12x4 = 48 For cleat 4 x8 = 32 For glazing plate @15 cm c/c in 75 cm length 2x6 = 12 Total = 92 Nos.	100Nos.	92	108.00	99.36
08107	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos.	4	630.00	252.00
16021	Polyester powder coating 50 microns on aluminium sections.	Kg.	21.65	70.00	1515.50
16020	Neoprene / EPDM gasket in groove of meeting style	metre	2.35	30.00	70.50
	b. Carriage:				
	Carriage of material	Kg.	31.20	0.11	3.43
	c. Labours (for fabrication of frame):			0.00	
0215	Fitter (Grade I)	Day	1.00	380.00	380.00
0228	Beldar (Special)	Day	1.00	380.00	380.00
0203	Beldar	Day	0.50	300.00	150.00
0201	Bandhani	Day	0.40	300.00	120.00
	Labours (for fixing the shutter including hinges):				
0209	Carpenter 1st class	Day	0.20	425.00	85.00
0203	Belder	Day	0.50	300.00	150.00
					7968.79
	d. Labour for drilling holes, hire charges of drill, electricity charges, carriage of dash hold fastners & sundries	2%	on	7968.79	159.38
	e. Water charges : @ 0.50%	0.50%	on	8128.17	40.64
	f. Contractor's profit & overheads: @ 15%	15%	on	8168.81	1225.32
				Total	9394.13
				Total cost for 1 Kg.	464.83
				Say,	464.80
16.2	Providing and fixing 12 mm thick prelaminated three layer medium density (exterior grade) particle board grade-I, type II conforming to IS : 12823 bonded with phenol formaldehyde synthetic resin, of approved brand and manufacture in panelling fixed in aluminium doors, windows, shutters and partition frames with C.P. brass / stainless steel screws all complete as per architectural drawing and the direction of Engineer-in-charge :-				
16.2.1	Prelaminated particle board of approved quality with decorative lamination on one side and balancing lamination on other side.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 7.00 Sqm.	Sqm.			
	a. Materials:				

08215	Prelaminated particle board with decorative lamination on one side and balancing lamination on other side.	Sqm.	7.35	785.00	5769.75
	b. Carriage:				
	Carriage of material	LS	52.00	1.30	67.60
	c. Labours:				
0203	Belder	Day	1.00	300.00	300.00
0210	Carpenter (2nd class)	Day	0.90	380.00	342.00
					6479.35
	d. CP brass / stainless steel screws etc. @ 1.0% on total	1%	on	6479.35	64.79
	e. Sundries (scaffolding etc.) & contingencies: @ 3% on total	3%	on	6544.14	196.32
	f. Contractor's profit & overheads: @ 15% on total	15%	on	6740.46	1011.07
				Total	7751.53
				Total cost for 1 Sqm.	1107.36
				Say,	1,107.40

16.2.2 Prelaminated particle board of approved quality with decorative lamination on both side.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 7.00 Sqm.	Sqm.			
	a. Materials:				
08218	Prelaminated particle board with decorative lamination on both side	Sqm.	7.35	815.00	5990.25
	b. Carriage:				
	Carriage of material	LS	52.00	1.30	67.60
	c. Labours:				
0203	Belder	Day	1.00	300.00	300.00
0210	Carpenter (2nd class)	Day	0.90	380.00	342.00
					6699.85
	d. CP brass / stainless steel screws etc. @ 1% on total	1%	on	6699.85	67.00
	e. Sundries (scaffolding etc.) & contingencies: @ 3% on total	3%	on	6766.85	203.01
	f. Contractor's profit & overheads: @ 15% on total	15%	on	6969.86	1045.48
				Total	8015.34
				Total cost for 1	1145.05
				Say,	1,145.10

16.3 Providing and fixing glazing of approved quality in aluminium doors, windows, ventilator, shutters and partition etc. with EPDM rubber / neoprene gasket etc. complete as per architectural drawing and the direction of Engineer-in-charge (Cost of snap beading shall be paid in basic item) :-

16.3.1 With float glass panes of 4.0 mm thickness (weight not less than 10.0 kg / sqm)

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 Sqm.	Sqm.			
	a. Materials:				
08146	With glass panes of 4.0 mm thickness (weight not less than 10.0 kg / sqm)	Sqm.	1.10	360.00	396.00
16020	Neoprene /EPDM gasket	Mtr.	6.00	30.00	180.00
	b. Carriage:				
	Carriage of material	kg	11.00	0.14	1.54
	c. Labours:				
0210	Carpenter (2nd class)	Day	0.23	380.00	87.40
0203	Belder	Day	0.23	300.00	69.00
	d. Sundries (scaffolding etc.) & contingencies: @ 3% on total	3%	on	733.94	22.02
	e. Water charges: @ 1% on total	1%	on	755.96	7.56
	f. Contractor's profit & overheads: @ 15% on total	15%	on	785.54	117.83
				Total	881.35
				Total cost for 1	881.40
				Say,	881.40

16.3.2 With float glass panes of 5.5 mm thickness (weight not less than 13.75 kg / sqm)

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 Sqm.	Sqm.			
	a. Materials:				
08147	With glass panes of 5.5 mm thickness (weight not less than 13.75 kg / sqm)	Sqm.	1.1	535.00	588.50
16020	Neoprene /EPDM gasket	Mtr.	6.00	30.00	180.00
	b. Carriage:				
	Carriage of material	kg	15.13	0.14	2.12
	c. Labours:				
0210	Carpenter (2nd class)	Day	0.23	380.00	87.40
0203	Belder	Day	0.23	300.00	69.00
	d. Sundries (scaffolding etc.) & contingencies: @ 3%	3%	on	927.02	27.81
	on total				
	e. Water charges: @ 1% on total	1%	on	954.83	9.55
	f. Contractor's profit & overheads: @ 15% on total	15%	on	992.19	148.83
				Total	1113.21
	Total cost for 1			Say,	1,113.20
16.3.3	With float glass panes of 8 mm thickness (weight not less than 20 kg / sqm)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 Sqm.	Sqm.			
	a. Materials:				
08291	With glass panes of 8 mm thickness (weight not less than 20 kg / sqm)	Sqm.	1.1	680.00	748.00
16020	Neoprene /EPDM gasket	Mtr.	6.00	30.00	180.00
	b. Carriage:				
	Carriage of material	kg	22.00	0.14	3.08
	c. Labours:				
0210	Carpenter (2nd class)	Day	0.23	380.00	87.40
0203	Belder	Day	0.23	300.00	69.00
	d. Sundries (scaffolding etc.) & contingencies: @ 3%	3%	on	1087.48	32.62
	on total				
	e. Water charges: @ 1% on total	1%	on	1120.10	11.20
	f. Contractor's profit & overheads: @ 15% on total	15%	on	1163.92	174.59
				Total	1305.89
	Total cost for 1			Say,	1,305.90
16.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg. for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece MS sheet outer box with slide plate etc. complete as per direction of the Engineer-in-charge:-				
16.4.1	With stainless steel cover plate minimum 1.25 mm thickness				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1No.	No.			
	a. Materials:				
16017	Hydraulic floor spring with cover	No.	1	1650.00	1650.00
	Cement concrete 1:2:4 [vide RCC Sl. No. 4.1.3] "A"	cum	0.002	8086.90	16.17
	b. Labours:				
0210	Carpenter 2nd class	Day	0.01	380.00	3.80
0218*	Mason (avg)	Day	0.16	400.00	64.00
0203	Belder	Day	0.17	300.00	51.00
	c. Sundries (scaffolding etc.), screws, carriage & contingencies: @ 3% on total except A	3%	on	1768.80	53.06
	d. Water charges: @ 1% on total except A	1%	on	1821.86	18.22
	e. Contractor's profit & overheads: @ 15% on total except A	15%	on	1840.08	276.01
				Total	2132.26
	Total cost for 1 No.			Say,	2,132.30

16.4.2 With CP brass cover plate minimum 1.25 mm thickness

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16016	Hydraulic floor spring with cover	No.	1	1780.00	1780.00
	Cement concrete 1:2:4 [vide RCC Sl. No. 4.1.3] "A"	cum	0.002	8086.90	16.17
	b. Labours:				
0210	Carpenter 2nd class	Day	0.01	380.00	3.80
0218*	Mason (avg)	Day	0.16	400.00	64.00
0203	Belder	Day	0.17	300.00	51.00
	c. Sundries (scaffolding etc.), screws, carriage & contingencies: @ 3% on total except A	3%	on	1898.80	56.96
	d. Water charges: @ 1% on total except A	1%	on	1955.76	19.56
	e. Contractor's profit & overheads: @ 15% on total except A	15%	on	1975.32	296.30
				Total	2287.79
	Total cost for 1 No.			Say,	2,287.80

16.5 Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee / angle sections, of approved make conforming to IS : 733 in frames of false ceiling including aluminium angle cleats with necessary C.P. brass / stainless steel sunk screws, aluminium perimeter angles fixed to wall with stainless steel rawl plugs @ 450 mm centre to centre and fixing the frame work to G.I. level adjusting hangers 6 mm dia. with necessary cadmium plated machine screws all complete as per approved architectural drawings and the direction of Engineer-in-charge (level adjusting hangers, ceiling cleats and expansion hold fasteners to be paid for separately):-

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 6.35 Kg. [2.40 x 2.40 = 5.76 sqm]				
	a. Materials:				
16001	Aluminum main runner - assuming Tee of size 35 x 23.5 x 1.5 mm @600 mm c/c 3.00 x 2.40 m =7.20 m. Extra for light fittings 2 x 1.20 m = 2.40 m Total = 9.60 m @ 0.247 kg/m = 2.370 kg. Aluminium cross runner - assuming Tee of size 35 x 23.5 x 1.5 mm @ 600 mm c/c 3x4x0.60 m = 7.20 m (-) 2x0.30 +(-) 0.60 m Total = 6.60 m @0.247 kg/m = 1.630 kg Perimeter angle aluminium assuming size 25.4 x 25.4 x 1.63 mm @ 600 mm c/c 4x2.40 m = 9.60 m @ 0.213 kg/m = 2.045 kg CLEATS Aluminium angle - assuming size 25.4 x 25.4 x 1.63 mm Extra for light fittings = 3 x 2x 2 = 12 m Corner = 4.0 For joining rinners = 42.0 Total = 58 x 0.025 = 1.45 m @ 0.213 kg/m = 0.309 kg. Sub Total = 2.37+1.63+2.045+0.309 = 6.354 kg. Add 5% wastage = 0.318 kg Total = 6.672 kg	Kg.	6.67	220.00	1467.84
08056	CP brass / stainless steel screws 20 mm for cleat angle	100Nos.	1.16	108.00	1.25
05050	Rawl plugs for perimeter angle fixing	Nos.	24	7.00	168.00
16022	Expoxy powder coating 50micron on aluminium sections.	Kg.	6.67	64.00	427.01
	b. Carriage:				
	Carriage of material	Kg.	6.67	0.11	0.73
	c. Labours:				
0209	Carpenter 1st class	Day	0.64	425.00	272.00
0203	Beldar	Day	0.64	300.00	192.00
	d. Scaffolding, ladders, challis etc. @ 0.5% on total	0.50%	on	2528.83	12.64
	e. Electricity charges: @ 0.50% on total	0.50%	on	2541.47	12.71
	f. Sundries & contingencies: @ 3% on total	3%	on	2554.18	76.63

g. Contractor's profit & overheads: @ 15% on total	15%	on	2630.81	394.62
			Total	3025.43
			Total cost for 1 Kg.	476.45
			Say,	476.50

- 16.6** Providing and fixing 6 mm dia G.I. level adjusting hangers (upto 1200 mm length) fixed to roof slabs by means of ceiling cleats made out of G.I. flat 40x3mm size 60mm long and stainless steel expandable dash fasteners 12.5 mm dia. 50 mm long, complete as per architectural drawing and the direction of Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 23 Nos. (Hangers in 2.40 m x2.40m = 5.76 sqm)				
	a. Materials:				
16002	6 mm dia G.I. adjusting hangers including clips (upto 1200 mm length) For light fitting 2x4 = 8.00 Nos. For runners = 15.00 Total = 23 Nos.	Nos.	23.00	33.00	759.00
11021	Ceiling cleats made out of 40 x 3 mm GI flat size 60 mm long 23 x 0.06 = 1.38 m @ 0.95 kg/m 1.31 kg Add 5% wastage = 0.07 kg. Total = 1.38 kg	Qtl.	0.014	5440.00	75.07
16015	Dash hold fasteners 12.5 mm dia, 50 mm long with 6 mm dia bolt	Nos.	23	60.00	1380.00
	b. Labours:				
0209	Carpenter 1st class	Day	0.35	425.00	148.75
0203	Beldar	Day	0.27	300.00	81.00
	c. Scaffolding, ladders, challis etc. @ 0.50% on total	0.50%	on	2443.82	12.22
	d. Hire charge for drill machine etc @ 1.00% on total	1.00%	on	2456.04	24.56
	e. Electricity charges: @ 0.50% on total	0.50%	on	2480.60	12.40
	f. Sundries, carriage & contingencies: @ 3% on total	3%	on	2493.00	74.79
	g. Contractor's profit & overheads: @ 15% on total	15%	on	2567.79	385.17
				Total	2952.96
				Total cost for 1 No.	128.39
				Say,	128.40

- 16.7** Providing and fixing machine moulded aluminium covering of approved pattern & design, made out of machine cut aluminium sheet and machine holed for receiving dash fastener, over expansion joints on vertical surfaces/ceiling floors, the fixing on plate in one row on one side of joint only shall be done with stainless steel dash fasteners of 8 mm dia and 75 mm long bolt including providing aluminium washers 2 mm thick and 15 mm dia, at a staggered pitch of 200 mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete as required and as per architectural drawings and the direction of Engineer-in-charge:-

- 16.7.1** Anodised aluminium sheet of 2.5 mm thick (anodised transparent or dyed to required shade according to IS : 1868 , minimum anodic coating of grade AC 15)

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 7.0 Kg.	Kg.			
	a. Materials:				
10006	Aluminium sheet of 2.5 mm thick , 170mm wide 5.88 x 0.17 m 1.00 sqm @7.00kg/sqm = 7.00 kg Add 5% wastage = 0.35 kg Total = 7.35 kg	Kg.	7.35	230.00	1690.50
16012	Anodising 15 microns on aluminium sections.	Kg.	7.35	40.00	294.00
16014	Cadmium plated full threaded steel screws 4 mm dia 30 mm long	100Nos.	30	35.00	10.50
16011	Aluminium washers 15 mm dia 2 mm thick	100Nos.	30	11.00	3.30
16031	Stainless steel dash fastener of 8 mm dia and 75 mm long bolt	Nos.	30	14.00	420.00
	b. Labours:				
0210	Carpenter 2nd class	Day	0.392	380.00	148.96
0203	Beldar	Day	0.392	300.00	117.60

c. Scaffolding, ladders, challis, machine work etc. @	3%	on	2684.86	80.55
3% on total				
d. Electricity charges: @ 0.50% on total	0.50%	on	2765.41	13.83
e. Sundries & contingencies: @ 3% on total	3%	on	2779.24	83.38
f. Contractor's profit & overheads: @ 15% on total	15%	on	2862.62	429.39
			Total	3292.01
			Total cost for 1 Kg.	470.29
			Say,	470.30

16.7.2 Powder coated aluminium sheet of 2.5 mm thick (minimum thickness of powder coating of 50 micron).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 7.0 Kg.	Kg.			
	a. Materials:				
10006	Aluminium sheet of 2.5 mm thick , 170mm wide 5.88 x 0.17 m 1.00 sqm @7.00kg/sqm = 7.00 kg Add 5% wastage = 0.35 kg Total = 7.35 kg	Kg.	7.35	230.00	1690.50
16022	Powder coating 50 microns on aluminium sections.	Kg.	7.35	64.00	470.40
16014	Cadmium plated full threaded steel screws 4 mm dia 30 mm long	100Nos.	30	35.00	10.50
16011	Aluminium washers 15 mm dia 2 mm thick	100Nos.	30	11.00	3.30
16031	Stainless steel dash fastener of 8 mm dia and 75 mm long bolt	Nos.	30	14.00	420.00
	b. Labours:				
0210	Carpenter 2nd class	Day	0.392	380.00	148.96
0203	Beldar	Day	0.392	300.00	117.60
	c. Scaffolding, ladders, challis, machine work etc. @	3%	on	2861.26	85.84
	3% on total				
	d. Electricity charges: @ 0.50% on total	0.50%	on	2947.10	14.74
	e. Sundries & contingencies: @ 3% on total	3%	on	2961.84	88.86
	f. Contractor's profit & overheads: @ 15% on total	15%	on	3050.70	457.61
				Total	3508.31
				Total cost for 1 Kg.	501.19
				Say,	501.20

16.8 Filling the gap in between aluminium frame and adjacent RCC/brick work by providing weather silicon sealant over backer rod of approved quality etc. complete as per architectural drawing and direction of the Engineer-in charge:- (i) Upto 5 mm depth and 5 mm width.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 Mtr.	Mtr.			
	a. Materials:				
16019	Masking tape	Mtr.	2.00	3.00	6.00
16023	Silicon sealant	Cartridge	0.09	350.00	30.45
	b. Labours:				
0210	Carpenter 2nd class	Day	0.05	380.00	19.00
0203	Helper	Day	0.07	300.00	21.00
	c. Sundries & contingencies: @ 3% on total	3%	on	76.45	2.29
	d. Contractor's profit & overheads: @ 15% on total	15%	on	78.74	11.81
				Total	90.55
				Total cost for 1 Mtr.	90.55
				Say,	90.60

16.9

Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side having 12 mm air gap including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (both primary and secondary sealant) of approved quality etc. complete as per specification, drawing and direction of Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.0 Sqm	Sqm			
	a. Materials:				
16018	Double glazed hermetically sealed glazing with 10% wastage	Sqm.	1.10	2200.00	2420.00
16020	Neoprene / EPDM gasket	Mtr.	6.00	30.00	180.00
	b. Labours:				
0217	Glazier	Day	0.23	380.00	87.40
0203	Beldar	Day	0.46	300.00	138.00
	c. Screws, perforated aluminium spacers, desiccants etc. @5.00% on total	5%	on	2825.40	141.27
	d. Sundries & contingencies: @ 3% on total	3%	on	2966.67	89.00
	e. Contractor's profit & overheads: @ 15% on total	15%	on	3055.67	458.35
				Total	3514.02
	Total cost for 1			Say,	3514.02
					3,514.00

16.10

Providing and fixing stainless steel (SS 304 grade) adjustable friction window stay of approved quality with necessary stainless steel screws etc. to the side hung windows etc. complete as per direction of Engineer-in-charge:-

16.10.1 205 x 19 mm

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16026	Stainless steel (SS 304 grade) adjustable friction window stays	No.	1	200.00	200.00
16024	Stainless steel screws 30mm x4mm.	100 Nos.	4	38.00	1.52
	b. Labours:				
0210	Carpenter 2nd class	Day	0.014	380.00	5.32
0203	Helper	Day	0.014	300.00	4.20
	c. Sundries & contingencies: @ 2% on total	2%	on	211.04	4.22
	d. Contractor's profit & overheads: @ 15% on total	15%	on	215.26	32.29
				Total	247.55
	Total cost for 1 No.			Say,	247.60

16.10.2 255 x 19 mm.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16025	Stainless steel (SS 304 grade) adjustable friction window stays	No.	1	235.00	235.00
16024	Stainless steel screws 30mm x4mm.	100 Nos.	4	38.00	1.52
	b. Labours:				
0210	Carpenter 2nd class	Day	0.014	380.00	5.32
0203	Helper	Day	0.014	300.00	4.20
	c. Sundries & contingencies: @ 2% on total	2%	on	246.04	4.92
	d. Contractor's profit & overheads: @ 15% on total	15%	on	250.96	37.64
				Total	288.60
	Total cost for 1 No.			Say,	288.60

16.10.3 355 x 19 mm.					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16027	Stainless steel (SS 304 grade) adjustable friction window stays	No.	1	295.00	295.00
16024	Stainless steal screws 30mm x4mm.	100 Nos.	4	38.00	1.52
	b. Labours:				
0210	Carpenter 2nd class	Day	0.014	380.00	5.32
0203	Helper	Day	0.014	300.00	4.20
	c. Sundries & contingencies: @ 2% on total	2%	on	306.04	6.12
	d. Contractor's profit & overheads: @ 15% on total	15%	on	312.16	46.82
				Total	358.98
	Total cost for 1 No.			Say,	359.00
16.10.4 510 x 19 mm.					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16028	Stainless steel (SS 304 grade) adjustable friction window stays	No.	1	530.00	530.00
16024	Stainless steal screws 30mm x4mm.	100 Nos.	4	38.00	1.52
	b. Labours:				
0210	Carpenter 2nd class	Day	0.014	380.00	5.32
0203	Helper	Day	0.014	300.00	4.20
	c. Sundries & contingencies: @ 2% on total	2%	on	541.04	10.82
	d. Contractor's profit & overheads: @ 15% on total	15%	on	551.86	82.78
				Total	634.64
	Total cost for 1 No.			Say,	634.60
16.10.5 710 x 19 mm.					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16029	Stainless steel (SS 304 grade) adjustable friction window stays	No.	1	935.00	935.00
16024	Stainless steal screws 30mm x4mm.	100 Nos.	4	38.00	1.52
	b. Labours:				
0210	Carpenter 2nd class	Day	0.014	380.00	5.32
0203	Helper	Day	0.014	300.00	4.20
	c. Sundries & contingencies: @ 3% on total	3%	on	946.04	28.38
	d. Contractor's profit & overheads: @ 15% on total	15%	on	974.42	146.16
				Total	1120.58
	Total cost for 1 No.			Say,	1,120.60
16.11 Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. of approved quality complete as per direction of Engineer-in-charge:-					
16.11.1 Anodised aluminium of grade AC 15).					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16003	Anodised aluminium casement windows fastener	No.	1	42.00	42.00
16030	Stainless steel screws 25mm x4mm	100Nos.	4	42.00	1.68
	b. Labours:				
0209	Carpenter 1st class	Day	0.006	425.00	2.55
	c. Sundries & contingencies: @ 3% on total	3%	on	46.23	1.39
	d. Contractor's profit & overheads: @ 15% on total	15%	on	47.62	7.14

Total cost for 1 No. Total Say, 54.76
54.80

16.11.2 Powder coated aluminium minimum thickness 50 micron.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16005	Powder coated aluminium casement windows fastener	No.	1	46.00	46.00
16030	Stainless steel screws 25mm x4mm	100Nos.	4	42.00	1.68
	b. Labours:				
0209	Carpenter 1st class	Day	0.006	425.00	2.55
	c. Sundries & contingencies: @ 3% on total	3%	on	50.23	1.51
	d. Contractor's profit & overheads: @ 15% on total	15%	on	51.74	7.76
	Total cost for 1 No.			Total Say,	59.50 59.50

16.11.3 Polyester powder coated aluminium minimum thickness 50 micron.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16004	Polyester powder coated casement windows fastener	No.	1	50.00	50.00
16030	Stainless steel screws 25mm x4mm	100Nos.	4	42.00	1.68
	b. Labours:				
0209	Carpenter 1st class	Day	0.006	425.00	2.55
	c. Sundries & contingencies: @ 3% on total	3%	on	54.23	1.63
	d. Contractor's profit & overheads: @ 15% on total	15%	on	55.86	8.38
	Total cost for 1 No.			Total Say,	64.24 64.20

16.12 Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. of approved quality complete as per direction of Engineer-in-charge:-

16.12.1 Anodised aluminium of grade AC 15).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16006	Anodised aluminium round shape handle.	No.	1	53.00	53.00
16030	Stainless steel screws 25mm x4mm	100Nos.	4	42.00	1.68
	b. Labours:				
0209	Carpenter 1st class	Day	0.006	425.00	2.55
	c. Sundries & contingencies: @ 3% on total	3%	on	57.23	1.72
	d. Contractor's profit & overheads: @ 15% on total	15%	on	58.95	8.84
	Total cost for 1 No.			Total Say,	67.79 67.80

16.12.2 Powder coated aluminium minimum thickness 50 micron.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16008	Powder coated aluminium round shape handle.	No.	1	57.00	57.00
16030	Stainless steel screws 25mm x4mm	100 Nos.	4	42.00	1.68
	b. Labours:				
0209	Carpenter 1st class	Day	0.006	425.00	2.55
	c. Sundries & contingencies: @ 3% on total	3%	on	61.23	1.84
	d. Contractor's profit & overheads: @ 15% on total	15%	on	63.07	9.46
	Total cost for 1 No.			Total Say,	72.53 72.50

16.12.3 Polyester powder coated aluminium minimum thickness 50 micron.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
16007	Polyester powder coated aluminium round shape handle.	No.	1	66.00	66.00
16030	Stainless steel screws 25mm x4mm	100Nos.	4	42.00	1.68
	b. Labours:				
0209	Carpenter 1st class	Day	0.006	425.00	2.55
	c. Sundries & contingencies: @ 3% on total	3%	on	70.23	2.11
	d. Contractor's profit & overheads: @ 15% on total	15%	on	72.34	10.85
				Total	83.19
	Total cost for 1 No.			Say,	83.20
16.13	Providing and fixing aluminium tubular handle bar of 32 mm outer dia, 3.0 mm thick and 2100 mm long with Stainless Steel screws etc. of approved quality complete as per direction of Engineer-in-charge:-				
16.13.1	Anodised aluminium of grade AC 15).				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Nos. handle bar	No.			
	a. Materials:				
	Aluminium sections				
16001	10x22/7x14(0.032x0.032 - 0.026 x 0.026) x2.10 = 0.0057 cum @ 2710 kg/cum = 15.56 kg	Kg.	16.34	220.00	3594.80
	Add 5% wastage = 0.78 kg				
	Total = 16.34 kg				
16012	Anodising 15 microns on aluminium sections.	Kg.	16.34	40.00	653.60
16024	Stainless steel screws 30mm x4mm.	100Nos.	8	38.00	3.04
	b. Labours:				
0209	Carpenter 1st class	Day	0.125	425.00	53.13
	c. Sundries & contingencies: @2% on total	3%	on	4304.57	129.14
	d. Contractor's profit & overheads: @ 15% on total	15%	on	4433.71	665.06
				Total	5098.77
	Total cost for 1 No.			Say,	509.90
16.13.2	Powder coated aluminium minimum thickness 50 micron.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Nos. handle bar	No.			
	a. Materials:				
	Aluminium sections				
16001	10x22/7x14(0.032x0.032 - 0.026 x 0.026) x2.10 = 0.0057 cum @ 2710 kg/cum = 15.56 kg	Kg.	16.34	220.00	3594.80
	Add 5% wastage = 0.78 kg				
	Total = 16.34 kg				
16022	Expoxy powder coating 50micron on aluminium sections.	Kg.	16.34	64.00	1045.76
16024	Stainless steel screws 30mm x4mm.	100Nos.	8	38.00	3.04
	b. Labours:				
0209	Carpenter 1st class	Day	0.125	425.00	53.13
	c. Sundries & contingencies: @ 3% on total	3%	on	4696.73	140.90
	d. Contractor's profit & overheads: @ 15% on total	15%	on	4837.63	725.64
				Total	5563.27
	Total cost for 1 No.			Say,	556.30

16.13.3 Polyester powder coated aluminium minimum thickness 50 micron.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Nos. handle bar	No.			
	a. Materials:				
	Aluminium sections				
16001	10x22/7x14(0.032x0.032 - 0.026 x 0.026) x2.10 = 0.0057 cum @ 2710 kg/cum = 15.56 kg	Kg.	16.34	220.00	3594.80
	Add 5% wastage = 0.78 kg				
	Total = 16.34 kg				
16021	Polyester powder coating 50 microns on aluminium sections.	Kg.	16.34	70.00	1143.80
16024	Stainless steal screws 30mm x4mm.	100Nos.	8	38.00	3.04
	b. Labours:				
0209	Carpenter 1st class	Day	0.125	425.00	53.13
	c. Sundries & contingencies: @ 3% on total	3%	on	4794.77	143.84
	d. Contractor's profit & overheads: @ 15% on total	15%	on	4938.61	740.79
				Total	5679.40
	Total cost for 1 No.			Say,	567.90

16.14 Providing and fixing 100 mm brass locks (best make of approved quality) with 6 levers without pair of handles for aluminium doors including necessary cutting and making good etc. complete as per direction of Engineer-in-charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.	No.			
	a. Materials:				
08166	Brass mortice latch & lock 100 mm with 6 levers without pair of handles	No.	1	295.00	295.00
	b. Labours:				
0209	Carpenter 1st class	Day	0.17	425.00	72.25
	c. Sundries & contingencies: @ 3% on total	3%	on	367.25	11.02
	d. Contractor's profit & overheads: @ 15% on total	15%	on	378.27	56.74
				Total	435.01
	Total cost for 1 No.			Say,	435.00

16.15 Providing and fixing anodised aluminium (anodysed transparent or dyed to required shade according to IS : 1868, minimum anodic coating of grading AC 15) sub frame work for windows and ventilators with extruded built up standard tubular sections of approved make conforming to IS : 733 and IS : 1285 fixed with dash fasener of required dia and size (Dash fastener to be paid seperately.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 4.082 Kg.	Kg.			
	a. Materials:				
	Aluminium section:				
16001	External Section of tye frame (Jindal section no TU/3644) V = 2x2.00 = 4.00 m H = 2x1.20 = 2.40M Total + 6.40 m @ 0.607 kg/m = 3.885 kg	Kg.	4.286	220.00	942.92
	Angle cleat 38 x 38 x 4.8 mm 50 mm long 4 x 0.05 = 0.20 m @ 0.985 kg/m = 0.197 kg				
	Sub total = 4.082 kg Add 5% wastage = 0.204 kg				
	Total = 4.286 kg				
16012	Anodising 15 microns on aluminium sections.	Kg.	4.286	40.00	171.44
08056	CP brass /Stainless steel screws 20 mm	100Nos.	8	108.00	8.64
	b. Labours:				
0228	Skilled Beldar (for floor rubbing etc.)	Day	0.04	380.00	15.20
0215	Fitter (Grade I)	Day	0.04	380.00	15.20
0203	Beldar	Day	0.02	300.00	6.00
0201	Bandhani	Day	0.01	300.00	3.00
	c. Sundries, carriage, drilling hole, electricity charges & contingencies: @ 5% on total	5%	on	1162.40	58.12
	d. Contractor's profit & overheads: @ 15% on total	15%	on	1220.52	183.08

Total	1403.60
Total cost for 1 Kg.	343.85
Say,	343.90

16.16 Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections for fixed portion / for shutters of doors, windows & ventilators.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 41.09 Kg.	Kg.			
	a. Materials:				
16013	Anodising 25 microns on aluminium sections	Kg.	41.09	50.00	2054.50
16012	Anodising 15 microns on aluminium sections.	Kg.	41.09	40.00	1643.60
	Difference of cost			"A"	410.90
	b. Sundries & contingencies: @ 3% on total "A"	3%	on	410.90	12.33
	c. Contractor's profit & overheads: @ 15% on total	15%	on	423.23	63.48
				Total	486.71
	Total cost for 1 Kg.				11.84
				Say,	11.80

16.17 Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS : 1868 with minimum anodic coating of Grade AC 15) of approved design / pattern, with approved standard section and fixed to the existing window frame with C.P. brass / stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge (only weight of grill to be measured for payment).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Kg.	Kg.			
	a. Materials:				
	Aluminium grill:				
0201	= 10 kg Add 20% wastage = 2 kg	Kg.	12.00	255.00	3060.00
	Total = 12 kg				
	b. Labours:				
0228	Skilled Beldar (for floor rubbing etc.)	Day	0.50	380.00	190.00
0215	Fitter (Grade I)	Day	0.25	380.00	95.00
0203	Beldar	Day	0.25	300.00	75.00
0201	Bandhani	Day	0.05	300.00	15.00
	c. Sundries, carriage, drilling hole, electricity charges & contingencies: @ 5% on total	5%	on	3435.00	171.75
	d. Contractor's profit & overheads: @ 15% on total	15%	on	3606.75	541.01
				Total	4147.76
	Total cost for 1 Kg.				414.78
				Say,	414.80

16.18 Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc. to be paid separately).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2.10 sqm	sqm			
	a. Materials:				
	Glass:				
16033	= 2.10 sqm Add 10% wastage = 0.21 sqm	sqm	2.31	1900.00	4389.00
	Total = 2.31 sqm				
	Stainless steel pivot and spring type fixing [Rate vide Item No. 16.4.1] "A"	each	2.00	2132.30	4264.60
	b. Labours:				
0217	Glazier	Day	0.90	380.00	342.00
0203	Beldar	Day	0.90	300.00	270.00
	c. Sundries, carriage, methylated spirit, sush rog cotton & contingencies: @ 5% on total	5%	on	9265.60	463.28
	d. Contractor's profit & overheads: @ 15% on total	15%	on	9728.88	1459.33
				Total	11188.21

Total cost for 1 sqm
Say, 5327.72
5,327.70

16.19

Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings, the aluminium quality as per grade 6063 T5 or T6 as per BS 1474, including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. (The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 6.50 Kg.	Kg.			
	a. Materials:				
	Aluminium section:				
	Width of the unit 1.60 m Height of the unit 4.20 m				
	Area of single unit = 6.72 sqm				
	Total area 6.72 sqm No. of panels 1 No.				
16001	Aluminium weight = 6.50 kg/sqm	Kg.	6.50	220.00	1430.00
	Vision height 2.20 m				
	Add for cleats, sleeves, screws etc. @5% 0.33				
	Spandrel height 2.0 m Total 6.83				
	Details of cost for 6.50 kg				
16022	Powder coating 50 microns on aluminium sections.	Kg.	6.50	64.00	416.00
	b. Labours:				
0215	Fitter (Grade I)	Day	0.08	380.00	30.40
0203	Beldar	Day	0.02	300.00	6.00
0201	Bandhani	Day	0.01	300.00	3.00
	c. Sundries, carriage, drilling hole, electricity charges & contingencies: @ 3% on total	3%	on	1885.40	56.56
	d. Contractor's profit & overheads: @ 15% on total	15%	on	1941.96	291.29
				Total	2233.25
				Total cost for 1 Kg.	343.58
				Say,	343.60

16.20

Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including:

a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation & drainage and protection against fire hazard including:

b) Fabricating and supplying serrated M.S. hot dip galvanised / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon seperator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.

c) Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment, including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass.

d) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.

e) Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer- in-Charge.

Note:- 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this sub- head. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves) on the external face shall be measured in sqm. up to two decimal places.

Note:- 2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accredited by NABL (National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Cost of testing is payable separately. The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NBL Certified laboratories.

(1) Performance Laboratory Test for Air Leakage Test (-50pa to - 300pa) & (+50pa to +300pa) as per ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr.

(2) Static Water Penetration Test. (50pa to 1500pa) as per ASTM E- 331-09 testing method for a range up to 2000 ml.

(3) Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01- 05 testing method for a range upto 2000 ml.

(4) Structural Performance Deflection and deformation by static air pressure test (1.5 times desing wind pressure without any failure) as per ASTM E-330-10 testing method for a range upto 50 mm.

(5) Seismic Movement Test (upto 30 mm) as per AAMA 501.4-09 testing method for Qualitative test. Tests to be conducted on site.

(6) Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000 ml.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 6.72 sqm	sqm			
	a. Materials:				
	Width of the unit 1.6 m				
	Height of the unit 4.2 m				
	Area of Single Unit 6.72 sqm				
	Total area 6.72 sqm No. of Pannels 1				
	Aluminium wight per sqm 6.50 kg/sqm				
	Vision height 2.2				
	Spandrel height 2.0 m				
	Details of cost for 6.72 sqm				
16034	Structural sealant - 6 mm x 12 mm	metre	17.02	33.00	561.66
16035	Spacer tape 6.4 mm thick x 6 mm wide	metre	20.11	22.00	442.42
16036	Weather Sealant - Non staining (600 ml)	each	1.96	465.00	911.40
16037	Weather Sealant - Normal (300 ml)	each	2.55	162.00	413.10
16038	MS Brackets / Aluminum Alloy Brackets	Kg.	9.78	110.00	1075.80
16039	Silicon Gasket in kg (Above 50 g/m)	Kg.	0.78	600.00	468.00
16040	EPDM Gasket in kg (Above 60 g/m)	Kg.	0.70	165.00	115.50
16041	Anchor Fastner - M10	each	2.00	12.00	24.00
16042	SS Bolt with washer of sizes for structural glazing / ACP cladding	each	2.00	39.00	78.00
16059	Baker rod	metre	5.04	5.50	27.72

16043	SS Screws of sizes for structural glazing / ACP Cladding	each	52.00	5.00	260.00
16062	Fire stop	metre	1.60	585.00	936.00
16044	Protective tape	metre	6.72	22.00	147.84
16045	GI flashing - 1.2 mm thick	Kg.	3.96	65.00	257.40
16019	Masking tape	metre	6.72	3.00	20.16
	b. Charges				
	For fabrication	55%	on	5739.00	3156.45
	For installation	50%	on	5739.00	2869.50
	For transportation	35%	on	5739.00	2008.65
	For scaffolding / loading / unloading	20%	on	5739.00	1147.80
	Designing charges etc.	4%	on	5739.00	229.56
	c. Sundries including water charges	3%	on	5739.00	172.17
	d. Contractor's profit & overheads: @ 15% on total	15%	on	15323.13	2298.47
				Total	17621.60
				Total cost for 1 sqm	2622.26
				Say,	2,622.30

16.21 Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthened clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor.“(Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.26.2)“For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm.“

(i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25 - 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 6.72 sqm	sqm			
	a. Materials:				
	Width of the unit 1.60 m Height of the unit 4.20 m				
	Area of single unit = 6.72 sqm				
	Total area 6.72 sqm No. of panels 1 No.				
	Area of glass deducting area of gap / grove 5% 6.38 sqm				
	Vision height 2.2 m				
	Wastage 10% 0.638 sqm				
	Spandrel height 2.0 m				
	Area of glass 7.02 sqm				
	Details of cost for 6.72 sqm				
16046	6 mm thick high performance glass	sqm	7.02	1985.00	13934.70
16047	6 mm thick clear heat strengthened glass	sqm	7.02	685.00	4808.70
	b. Charges				
	Insurance charges	1%	on	18743.40	187.43
	Fabrication charges including silicon sealant, baker rod, desecant etc.	25%	on	18743.40	4685.85
	Transportation including loading and unloading	1%	on	18743.40	187.43
	c. Sundries including water charges	3%	on	18743.40	562.30
	d. Contractor's profit & overheads: @ 15% on total	15%	on	24366.41	3654.96
				Total	28021.37
				Total cost for 1 sqm	4169.85
				Say,	4,169.90

- 16.22 Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer- in-Charge.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.76 sqm	sqm			
	a. Materials:				
	Width of the unit 1.6 m				
	Shutter Height of the unit 1.1 m				
	Outer glass 6 mm Area of Single Unit 1.76 sqm Inner glass 6 mm				
	Aluminium wight per sqm 7.78 kg/sqm Aluminium weight = 13.7 kg				
	No. of Locking point 4 No.				
	Total 67 kg				
	Wedge block 1 No.				
	Hinge size 0.512 m				
	Details of cost for 1.76 sqm				
16048	6 mm thick clear heat strengthened glass	each	3.00	135.00	405.00
16040	EPDM Gasket in kg (Above 60 g/m)	Kg.	0.80	165.00	132.00
16043	SS Screws of sizes for structural glazing / ACP Cladding	each	49.00	5.00	245.00
16044	Protective tape	metre	1.76	22.00	38.72
16049	ARMS GS HD- TOP HUNG - 20" TYPE P - COUPLE	pair	1.00	1705.00	1705.00
16050	Connecting block	each	2.00	42.00	84.00
16051	Curtain wall sticker	each	4.00	110.00	440.00
16052	Adjustable Fastening Pawl	each	4.00	42.00	168.00
16053	Corner drive	each	2.00	320.00	640.00
16054	Top wedge block	each	1.00	148.00	148.00
	b. Charges				
	For fabrication	20%	on	4005.72	801.14
	c. Sundries including water charges	3%	on	4005.72	120.17
	d. Contractor's profit & overheads: @ 15% on total	15%	on	4927.03	739.05
				Total	5666.08
				Total cost for 1 sqm	3219.36
				Say,	3,219.40

- 16.23 Providing, fabricating and supplying shadow box of required size and shape, for fixing in the spandrel portion of the structural glazing, in linear as well as curvilinear portions of the building by providing semi -rigid, inorganic, non-combustible fibre glass wool insulation 50 mm thick, conforming to IS: 8183 and BS: 3958 Part 5. The insulation layer shall have facing (factory bonded on surface # 1 of the fibre glass insulation layer), of black non-woven fibre glass tissue of nominal thickness 0.5 mm and nominal mass not less than 60 gm / sqm, made of randomly oriented glass fibres distributed in a binder by a wet-lay process including fixing 1.5 mm thick solid aluminum sheet backing using, 6 mm thick cement board including SS rivets, nuts, bolts, washers etc complete.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3.23 sqm	sqm			
	a. Materials:				
	Width of the unit 0.86 m				
	Height of the unit 3.75 m				
	Area 3.23 sqm				
	Area including wastage @5% 3.39 sqm				
	Details of cost for 3.23 sqm				
16055	Glass wool density 48 kg/sqm with Black Glass Tissue (BGT)	sqm	3.39	253.00	857.67
16063	GI/Aluminium Sheet (0.8 mm thick)	Kg.	21.30	50.00	1065.00
16056	SS Screws - # 8 x 19	each	32.00	11.00	352.00
16057	Weather Sealant - DC 789	cartridge	2.00	143.00	286.00

16058	Cement Board	sqm	3.39	275.00	932.25
	b. Charges				
	For fabrication	10%	on	3492.92	349.29
	For installation	10%	on	3492.92	349.29
	For clips & adhesives	20%	on	3492.92	698.58
	c. Sundries including water charges	3%	on	3492.92	104.79
	d. Contractor's profit & overheads: @ 15% on total	15%	on	4994.87	749.23
				Total	5744.10
				Total cost for 1 sqm	1778.36
				Say,	1,778.40

- 16.24 Providing and supplying Spandrel Glass Panels comprising of 6 mm thick heat strengthened monolithic float glass of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade so as to match the colour and shade of the IGUs in the vision panels etc. ,all complete for the required performances as specified, as per the Architectural drawings, as per the approved shop drawings, as specified, and as directed by the Engineer- inCharge.“For payment, only the actual area of glass on face # 1 of the glass panels (but excluding the area of grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm. (Payment for fixing of Spandrel Glass Panels in the curtain glazing is included in cost of relevent Item*).
- (i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3.23 sqm	sqm			
	a. Materials:				
	Width of the unit 0.86 m				
	Height of the unit 3.75 m				
	Area 3.23 sqm				
	Area including wastage @5% 3.39 sqm				
	Details of cost for 3.23 sqm				
16046	6 mm thick High performance glass	sqm	3.39	1985.00	6729.15
	b. Charges				
	For fabrication including silicon sealant, baker rod, desecant etc.	18%	on	6729.15	1211.25
	For insurance charges	1%	on	6729.15	67.29
	For trasportation including loading & unloading	10%	on	6729.15	672.92
	c. Sundries including water charges	3%	on	6729.15	201.87
	d. Contractor's profit & overheads: @ 15% on total	15%	on	8882.48	1332.37
				Total	10214.85
				Total cost for 1 sqm	3162.49
				Say,	3,162.50

- 16.25 Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including:
- (a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design.
- (b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of aluminium composite panel material of approved thickness and specification. The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc.

(c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium item.s The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete , as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places."

16.25.1 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 6.72 sqm	sqm			
	a. Materials:				
	Width of the unit 1.6 m				
	Height of the unit 4.2 m				
	Area of Single Unit 6.72 sqm				
	Total area 6.72 sqm No. of Pannels 1				
	Area including wastage @5% 7.06 sqm				
	Aluminium wight per sqm 4.50 kg/sqm				
	Details of cost for 6.72 sqm				
16036	Weather Sealant - Non staining (600 ml)	each	2.00	465.00	930.00
16037	Weather Sealant - Normal (300 ml)	each	2.00	162.00	324.00
16038	MS Brackets / Aluminum Alloy Brackets	Kg.	10.00	110.00	1100.00
16040	EPDM Gasket in kg (Above 60 g/m)	Kg.	0.70	165.00	115.50
16041	Anchor Fastner - M10	each	2.00	12.00	24.00
16042	SS Bolt with washer of sizes for structural glazing / ACP cladding	each	2.00	39.00	78.00
16059	Baker rod	metre	5.00	5.50	27.50
16043	SS Screws of sizes for structural glazing / ACP Cladding	each	49.00	5.00	245.00
16044	Protective tape	metre	7.00	22.00	154.00
16045	GI flashing - 1.2 mm thick	Kg.	4.00	65.00	260.00
16060	4 mm thick ACP	sqm	7.06	1100.00	7766.00
	b. Charges				
	For fabrication	30%	on	11024.00	3307.20
	For installation	30%	on	11024.00	3307.20
	For transportation	10%	on	11024.00	1102.40
	For scaffolding / loading / unloading	10%	on	11024.00	1102.40
	Designing charges etc.	4%	on	11024.00	440.96
	c. Sundries including water charges	3%	on	11024.00	330.72
	d. Contractor's profit & overheads: @ 15% on total	15%	on	20614.88	3092.23
				Total	23707.11
				Total cost for 1 sqm	3527.84
				Say,	3,527.80

16.25.2 3mm thick aluminium composite panel material consisting of 2.25mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick).

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 6.72 sqm	sqm			
	a. Materials:				
	Width of the unit 1.6 m				
	Height of the unit 4.2 m				
	Area of Single Unit 6.72 sqm				
	Total area 6.72 sqm No. of Pannels 1				
	Area including wastage @5% 7.06 sqm				
	Aluminium wight per sqm 4.50 kg/sqm				
	Details of cost for 6.72 sqm				
16036	Weather Sealant - Non staining (600 ml)	each	2.00	465.00	930.00
16037	Weather Sealant - Normal (300 ml)	each	2.00	162.00	324.00
16038	MS Brackets / Aluminum Alloy Brackets	Kg.	10.00	110.00	1100.00
16040	EPDM Gasket in kg (Above 60 g/m)	Kg.	0.70	165.00	115.50
16041	Anchor Fastner - M10	each	2.00	12.00	24.00
16042	SS Bolt with washer of sizes for structural glazing / ACP cladding	each	2.00	39.00	78.00
16059	Baker rod	metre	5.00	5.50	27.50
16043	SS Screws of sizes for structural glazing / ACP Cladding	each	49.00	5.00	245.00
16044	Protective tape	metre	7.00	22.00	154.00
16045	GI flashing - 1.2 mm thick	Kg.	4.00	65.00	260.00
16061	3 mm thick ACP	sqm	7.06	865.00	6106.90
	b. Charges				
	For fabrication	30%	on	9364.90	2809.47
	For installation	30%	on	9364.90	2809.47
	For transportation	10%	on	9364.90	936.49
	For scaffolding / loading / unloading	10%	on	9364.90	936.49
	Designing charges etc.	4%	on	9364.90	374.60
	c. Sundries including water charges	3%	on	9364.90	280.95
	d. Contractor's profit & overheads: @ 15% on total	15%	on	17512.37	2626.86
				Total	20139.23
				Total cost for 1 sqm	2996.91
				Say,	2,996.90

16.26

Design supply & installation of suspended Spider Glazing system designed to withstand the wind pressure as per IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider & bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/ beams by means of SS- 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener & anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion & seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof & dust proof.

The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&P, scaffolding, other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete. For the purpose of payment, actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured.

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 35.28 sqm				
	Façade area: Width 7.00m Height 5.07 m				
	Total = 35.28 sqm of 1 panel.	sqm			
	Fin.area: Width 0.40 m , Height = 2.3				
	Total = 4.6 sqm For 5 panel				
	A. Materials:				
	(A) Spider fitting				
16064	4 point façade glass bracket without flat head bolts	each	5	3540.00	17700.00

16065	2 point façade glass bracket (wall mounted without flat head bolts)	each	2	1775.00	3550.00
16066	1 point façade glass bracket (wall mounted without flat head bolts)	each	12	1390.00	16680.00
16067	Flate head bolt for brackets of spider glazing	each	36	690.00	24840.00
16068	400 mm long fin plate without fastners	pair	5	6345.00	31725.00
(B) Local Hardware					
Anchor Fastner - M10					
For one point spider fitting =12x2=24 nos					
16041	For two point spider fitting =2x2=4 nos For 400mm fin plates =5x6=30 nos	each	58	12.00	696.00
Total=58 nos					
Non staining water resistant Clear silicon filling in gap					
16070	Vr. joints between glasses = 7x5.04=35.28m Hr.joints between glass & wall = 2x7.00=14.00 m Total=49.28 m	metre	49.28	64.00	3153.92
16069	Stainless steel U Channel of size (50x25x2mm)	metre	7.00	153.00	1071.00
(C) Glass Area					
16033	Toughened glass 12 mm thickness with hole =7.00x5.04=35.28 sqm + 1.76 sqm (Add 5% Wastage) Total = 37.04 sqm	sqm	37.04	1900.00	70376.00
16071	21mm thick clear toughened Laminated glass for fins with holes = 5x2.30x.40=4.60sqm + 0.23sqm (Add 5% Wastage) Total = 4.83 sqm	sqm	4.83	6400.00	30912.00
D. Charges					
For Baker Rod, Screw &Accessories		20%	on	4920.92	984.18
For Labour		5%	on	201688.10	10084.41
For Scaffolding		2%	on	201688.10	4033.76
E. Sundries including water charges		3%	on	215806.27	6474.19
F. Contractor's profit & overheads: @ 15% on total		15%	on	222280.46	33342.07
				Total	255622.53
				Total cost for 1 sqm	7245.54
				Say,	7,245.50

S U B - H E A D - 1 7



W A T E R P R O O F I N G A N D R E H A B I L I T A T I O N W O R K

SUB HEAD : 17.0 / WATER PROOFING AND REHABILITATION WORK

BASIC RATES

Code No.	Description	Unit	Rate
0125	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	₹ 175.00
0129	Vibrator (Needle type 40mm)	per day	₹ 436.00
0138	Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper	per day	₹ 1,350.00
0139	Compressor, gun, rubber pipes & other accessories-hire charge of plant & machinery i/c necessary fuel	per day	₹ 5,000.00
0140	Hire charges of Drill machine upto 30 mm dia	per day	₹ 185.00
0141	Hire charges of sand blasting equipment	per day	₹ 500.00
0142	Hire charges of compressor	per day	₹ 750.00
0143	Welding charges of shear key to existing reinforcement	each	₹ 2.50
0144	Hire charges of plant and Machinery that can inject 350 kg/day	per day	₹ 125.00
0203	Beldar	Day	₹ 300.00
0205	Bhisti/Waterman	Day	₹ 300.00
0207	Blacksmith 2nd class	Day	₹ 380.00
0212	Coolie	Day	₹ 300.00
0215	Fitter (grade 1)	Day	₹ 380.00
0216	Foreman	Day	₹ 425.00
0218*	Mason (average)	Day	₹ 400.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0222	Mason (for plain stone work) 2nd class	Day	₹ 380.00
0224	Mate	Day	₹ 300.00
0225	Mistry	Day	₹ 380.00
0226	Operator (Pile/Machine/Special Machine)	Day	₹ 425.00
0227	Painter	Day	₹ 340.00
0228	Skilled Beldar (for floor rubbing etc.)	Day	₹ 380.00
0229	Skilled torch operator for laying tack	Day	₹ 425.00
0235	Nozzleman / Gunman	Day	₹ 425.00
0236	Pump Operator	Day	₹ 425.00
0237	Helper (Technician)	Day	₹ 340.00
20038	Brick Aggregate (Single size) : 63 mm nominal size	cum	₹ 2,500.00
04006	Stone Aggregate (Single size) : 20 mm nominal size	cum	₹ 3,969.00
04007	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	₹ 4,005.00

Code No.	Description	Unit	Rate
04008	Stone Aggregate (Single size) : 10 mm nominal size	cum	₹ 4,040.00
05006	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	₹ 36,820.00
17002	Bituminous solution primer of approved quality	litre	₹ 60.00
17001	Bitumen felt fibre base (vegetable or animal) : As per IS 7193 Grade I	sqm	₹ 85.00
17009	Bitumen felt as per IS 7193 Grade II	sqm	₹ 95.00
06003	Bitumen felt :Type 3 Grade I	Sqm	₹ 85.00
03001	Cement (Portland)	tonne	₹ 6,100.00
04012	Coal (steam)	quintal	₹ 890.00
02003	Sand (fine) : Selected quarry	cum	₹ 370.00
17010	Kota stone slab 25mm thick (rough chiseled)	Sqm	₹ 300.00
04009	Stone grit 6 mm and down size or pea sized gravel	cum	₹ 3,750.00
04015	Water proofing materials	kg	₹ 36.00
17004	Fuel-LPG	kg	₹ 75.00
11036	Polyvinyl chloride sheet 400 micron thick	sqm	₹ 50.00
17011	Fibre glass tissue reinforcement Type II Grade I	sqm	₹ 105.00
17012	Water stops serrated with central bulb (225mm wide, 8-11 mm thick)	metre	₹ 255.00
17013	Water stops dumb bell with central bulb	metre	₹ 200.00
17014	Kickers	metre	₹ 235.00
17015	APP modified polymeric felt (two layers) 1.5mm thick	sqm	₹ 90.00
17016	APP modified polymeric felt (two layers) 2mm thick	sqm	₹ 120.00
17003	APP modified 2mm thick membrane reinforced with glass fibre matt	sqm	₹ 120.00
17005	APP modified 3mm thick membrane reinforced with glass fibre matt	sqm	₹ 240.00
17007	APP modified 3mm thick membrane reinforced with non-woven polyester matt	sqm	₹ 245.00
17017	Bitumen primer for bitumen membrane	litre	₹ 110.00
17006	Geotextile 120 grams per sqm non-woven membrane, 100% polyester of thickness 1 to 1.25mm	sqm	₹ 55.00
17018	Polymer modified cementation coating	kg	₹ 170.00
17019	Fibre glass cloth	sqm	₹ 55.00
17020	Fibre reinforced elastomeric liquid waterproofing membrane	litre	₹ 240.00
17021	Integral Crystalline Slurry	kg	₹ 325.00
17022	Crystalline Mortar	kg	₹ 300.00
17023	Swellable type water stop tape (Crystalline sealing compound)	metre	₹ 500.00
17024	Swellable type water stop primer	litre	₹ 2,100.00

Code No.	Description	Unit	Rate
17025	Cementious water proofing coating with elastic polymers	kg	₹ 225.00
17026	Chemical Rust Remover	litre	₹ 240.00
17027	Epoxy	kg	₹ 660.00
17028	SBR Polymer	kg	₹ 215.00
17029	Wooven PVC cloth	sqm	₹ 30.00
17030	Hard drawn steel wire fabric size 75 x 25 mm mesh of weight not less than 7.75 kg/sqm	sqm	₹ 480.00
17031	Adhesive chemical	ml	₹ 3.00
17032	Bit of drilling machine for Hole upto 30mm dia	each	₹ 570.00
17033	GI injection nipple 12mm dia, 75mm long	each	₹ 50.00
17034	Blowing compressed air for cleaning holes upto 30mm dia	each	₹ 12.00
17035	L shaped 100mm long, 10mm dia mild steel shear key	kg	₹ 80.00
17036	Acrylic Polymer chemical for cracks	kg	₹ 35.00
0467	Carriage : Steam coal	tonne	₹ 110.94
0405	Carriage : Brick/ Stone aggregate below 40 mm nominal size	cum	₹ 159.75
0404	Carriage : Brick/ Stone aggregate 40 mm nominal size and above	cum	₹ 172.74
0469	Carriage : Stone blocks white & red sand stone & kota stone slab	tonne	₹ 110.94
0421	Carriage : Cement/ Water proofing compound	tonne	₹ 110.94
0425	Carriage : Sand (fine) : Selected quarry	cum	₹ 142.63
0472	Carriage : Tar/ Bitumen	tonne	₹ 110.94

Sub Head : 17.0
Water Proofing Work

- 1 Description of items has been given very briefly. Relevant clauses of CPWD's specifications may be referred for
 (i) IS-73: Specification for paving bitumen.
 (i) IS-702: Specification for industrial bitumen.
 (ii) IS-1322: Specification for bitumen felts for water proofing and damp proofing.
 (iii) IS-1580: Specification for bituminous compounds for water proofing and caulking purpose.
 (iv) IS-2645: Specification for integral water proofing compounds for cement mortar and concrete.
 (v) IS-3384: Specification for bitumen primer for water proofing and damp proofing.
 (vi) IS-7193: Specification for glass fibre base coal tarpitch & bitumen felts (Amendment I).
- 2 The rates are inclusive of form work i.e. inclusive of all necessary centring / staging, shuttering, scaffolding etc., removal of form work and with all such arrangements as specified in CPWD's specification.
- 3 Sand can be either coarse or fine as required/available. Here, provision of fine sand is considered only due to non-availability of coarse sand in Tripura. However, design of concrete dictates for use of coarse sand, then separate analysis may be made as per site condition.
- 4 Manual mixing of cement mortars have been considered here. However, for using of mechanical mixer, the cost will differ with manual mixing as per item no.3.17.
- 5 Green work shall be protected from the effects of sun and rain by suitable covering and also from damage, mortar dropping etc.during the execution of the work. Masonry work in cement or composite mortar shall be kept constantly moist on all faces for a minimum period of seven days.

17.1	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of :				
	(i) Ist layer of 22 mm to 25 mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement : 3 fine sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound.				
	(ii) 2nd layer of 25 mm thick cement mortar 1:3 (1 cement: 3 fine sand) mixed with water proofing compound in recommended proportions.				
	(iii) Finishing top with stone aggregate of 10 mm to 12 mm nominal size spreading @ 8 cum/sqm thoroughly embedded in the 2nd layer.				
17.1.1	Using rough kota stone.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
	1st layer Cement mortar 1:3 for fixing of stone =10 x 0.025 = 0.25				
3.1.3	Rate as per Item No. 3.1.3 of SH : Mortar	cum	0.250	₹ 3,992.09	₹ 998.02
	Kota stone slab = 10 sqm Wastage @ 10% = 1 sqm Total =10 + 1 = 11 sqm				
17010	Kota stone slab 25mm thick (rough chiseled)	sqm	11.000	₹ 300.00	₹ 3,300.00
	Cement mortar 1:3 = 10x0.025 = 0.25cum Wastage @ 12% = 0.03cum Total = 0.28cum	cum	0.280	₹ 3,992.09	₹ 1,117.79
3.1.3	Rate as per Item No. 3.1.3 of SH : Mortar for slurry Bed = 2x10.00 @ 2kg/cum = 40.00kg Joints 4x3.7x0.02x0.037 = 0.011cum + 25x0.6x0.02x0.037= 0.011cum = 0.022cum @ 1440 kg/cum = 31.68kg Total = (40.00 + 31.68)kg = 71.88kg or 0.72t				
03001	Portland Cement	tonne	0.072	₹ 6,100.00	₹ 439.20
04015	Water proofing materials Mortar=0.25 + 0.28= 0.53cum Cement in 0.53cum @ 5.1 q/cum = 2.7 quintal Cement in slurry = 0.73 quintal Total = 3.43 quintal @ 1kg for 50kg of cement = 6.86kg	kg	6.860	₹ 36.00	₹ 246.96
04007	Stone Aggregate (Single size) : 12.5mm nominal size @ 8 cum/sqm 1x10.3x8x1/1000 = 0.08cum	cum	0.080	₹ 4,005.00	₹ 320.40
	b. Carriage:				
0469	Cartage 11x0.025 @ 2330kg/cum = 0.64t Carriage of stone blocks white & red stone & kota stone slab	tonne	0.640	₹ 110.94	₹ 71.00
0421	Portland Cement	tonne	0.072	₹ 110.94	₹ 7.99
0405	Stone aggregate below 40 mm nominal size	cum	0.080	₹ 159.75	₹ 12.78
	c. Labour:				
	Labour for base mortar & kota stone laying i/c slurry job				
0222	Mason (for plain stone work) 2nd class	Day	1.200	₹ 380.00	₹ 456.00
0203	Belder	Day	1.000	₹ 300.00	₹ 300.00
0212	Coolie	Day	1.000	₹ 300.00	₹ 300.00
	Labour for top layer & spreading stone grit				
0222	Mason (for plain stone work) 2nd class	Day	1.080	₹ 380.00	₹ 410.40
0203	Belder	Day	1.080	₹ 300.00	₹ 324.00
0205	Waterman	Day	0.450	₹ 300.00	₹ 135.00

				Total	₹ 8,439.54
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 8,439.54	₹ 84.40
				Total	₹ 8,523.94
	e. Sundries & contingencies: @ 3.0% on total	3.0%	on	₹ 8,523.94	₹ 255.72
				Total	₹ 8,779.66
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 8,779.66	₹ 1,316.95
		Total cost for 10 sqm			₹ 10,096.61
		Total cost for 1 sqm			₹ 1,009.66
			Say,	₹	1,009.70

17.2	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25 mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20 mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 fine sand) 20 mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :				
17.2.1	Using rough kota stone.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
	1st layer Kota stone slab = 10 sqm Wastage @ 10% = 1 sqm Total = 10 + 1 = 11 sqm				
17010	Kota stone slab 25mm thick (rough chiseled)	sqm	11.000	₹ 300.00	₹ 3,300.00
	[Cement slurry for jointing (6x3.70 = 22.70m) + (7x2.78 = 19.46m) = 41.66x0.025x0.012= 0.013cum] + [Cement slurry for filling 20mm gap 10x0.02 = 0.200cum] =0.213cum @ @ 1440 kg/cum = 306.70kg or 0.307t = 0.310t say				
03001	Portland Cement	tonne	0.310	₹ 6,100.00	₹ 1,891.00
12.3.1 & 12.5	Cement plaster 1:3 with neat cement punning (Rate as per Item No. 12.3.1 & 12.5 of SH: Finishing) A	sqm	10.000	₹ 275.90	₹ 2,759.00
04015	Water proofing materials Cement slurry =0.31t = 310kg Cement plaster 1:3 @ 13.62 q/100 Sqm = 136.20kg Total = 446.20kg @ 1kg for 50kg of cement = 8.90kg	kg	8.900	₹ 36.00	₹ 320.40
	b. Carriage:				
0469	Cartage 11x0.025 @ 2330kg/cum = 0.64t Carriage of stone blocks white & red stone & kota stone slab	tonne	0.640	₹ 110.94	₹ 71.00
0421	Portland Cement	tonne	0.310	₹ 110.94	₹ 34.39
	c. Labour:				
	Labour for fixing of Kota stone and applying cement & applying slurry				
0222	Mason (for plain stone work) 2nd class	Day	3.000	₹ 380.00	₹ 1,140.00
0203	Belder	Day	3.000	₹ 300.00	₹ 900.00
0212	Coolie	Day	1.000	₹ 300.00	₹ 300.00
				Total	₹ 10,715.79
	d. Water charges : @ 1.0% on total except A	1.0%	on	₹ 7,956.79	₹ 79.57
				Total	₹ 10,795.36
	e. Sundries & contingencies in/c cost for scaffolding etc.: @ 3.0% on total except A	3.0%	on	₹ 8,036.36	₹ 241.09
				Total	₹ 11,036.45
	f. Contractor's profit & overheads: @ 15.0% on total except A	15.0%	on	₹ 8,277.45	₹ 1,241.62
		Total cost for 10 sqm			₹ 12,278.07
		Total cost for 1 sqm			₹ 1,227.81
			Say,	₹	1,227.80

17.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like as required as per direction of the Engineer-in-charge, consisting of :				
	(i) 1st course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface.				
	(ii) 2nd course of 20 mm cement plaster 1:3 (1 cement : 3 fine sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.				
	(iii) 3rd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area.				
	(iv) 4th course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/ sqm).				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
	Cement slurry @ 4.4 kg/sqm = 44.00 kg = 0.044t				
03001	Portland Cement	tonne	0.044	₹ 6,100.00	₹ 268.40
	Cement plaster 1:3 (20mm thick)				
3.8	Rate as per item No. 3.8 of SH: Mortars	cum	0.224	₹ 5,003.35	₹ 1,120.75

05006	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	0.017	₹ 36,820.00	₹ 625.94
11036	Polyvinyl chloride sheet 400 micron thick	sqm	10.000	₹ 50.00	₹ 500.00
04015	Water proofing materials @ 1 kg per 50kg of cement used Cement slurry = 44kg Cement plaster 1:3 = 10 x (13.62x100)/100 = 136.2kg Total = 180.2 kg/ 50 = 3.60kg	kg	3.600	₹ 36.00	₹ 129.60
	b. Carriage:				
0421	Portland Cement	tonne	0.044	₹ 110.94	₹ 4.88
0472	Tar/ Bitumen	tonne	0.017	₹ 110.94	₹ 1.89
	c. Labour:				
0218*	Mason (average)	Day	0.940	₹ 400.00	₹ 376.00
0212	Coolie	Day	1.020	₹ 300.00	₹ 306.00
0205	Waterman	Day	1.100	₹ 300.00	₹ 330.00
0227	Painter	Day	0.200	₹ 340.00	₹ 68.00
0203	Belder	Day	1.330	₹ 300.00	₹ 399.00
0225	Mistry	Day	0.060	₹ 380.00	₹ 22.80
				Total	₹ 4,153.26
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 4,153.26	₹ 41.53
				Total	₹ 4,194.79
	e. Sundries & contingencies in/c cost for carriage of Water proofing materials & cost for scaffolding etc. : @ 4.5% on total	4.5%	on	₹ 4,194.79	₹ 188.77
				Total	₹ 4,383.56
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 4,383.56	₹ 657.53
		Total cost for 10 sqm			₹ 5,041.09
		Total cost for 1 sqm			₹ 504.11
				Say,	₹ 504.10

17.4	Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete as required as per direction of the Engineer-in-charge:				
17.4.1	Serrated with central bulb (225 mm wide, 8-11 mm thick)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 Metres	metre			
	a. Materials:				
17012	Water stops Dumb bell with central bulb (225mm wide, 8-11 mm thick)	metre	100.00	₹ 255.00	₹ 25,500.00
	b. Labour:				
0203	Belder	Day	2.000	₹ 300.00	₹ 600.00
				Total	₹ 26,100.00
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 26,100.00	₹ 261.00
				Total	₹ 26,361.00
	d. Sundries & contingencies in/c cost of wires etc. : @ 3.0% on total	3.0%	on	₹ 26,361.00	₹ 790.83
				Total	₹ 27,151.83
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 27,151.83	₹ 4,072.77
		Total cost for 100 metre			₹ 31,224.60
		Total cost for 1 metre			₹ 312.25
				Say,	₹ 312.30

17.4.2	Dumb bell with central bulb (180 mm wide, 8 mm thick)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100.00 Metres	metre			
	a. Materials:				
17013	Water stops Dumb bell with central bulb	metre	100.00	₹ 200.00	₹ 20,000.00
	b. Labour:				
0203	Belder	Day	2.000	₹ 300.00	₹ 600.00
				Total	₹ 20,600.00
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 20,600.00	₹ 206.00
				Total	₹ 20,806.00
	d. Sundries & contingencies in/c cost of wires etc. : @ 3.0% on total	3.0%	on	₹ 20,806.00	₹ 624.18
				Total	₹ 21,430.18
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 21,430.18	₹ 3,214.53
		Total cost for 100 metre			₹ 24,644.71
		Total cost for 1 metre			₹ 246.45
				Say,	₹ 246.50

17.4.3	Kickers (320 mm wide, 5 mm thick)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 Metres	metre			
	a. Materials:				
17014	Kickers	metre	100.00	₹ 235.00	₹ 23,500.00
	b. Labour:				
0203	Belder	Day	2.000	₹ 300.00	₹ 600.00
				Total	₹ 24,100.00

	c. Water charges : @ 1.0% on total	1.0%	on	₹ 24,100.00	₹ 241.00
				Total	₹ 24,341.00
	d. Sundries & contingencies in/c cost of wires etc. : @ 3.0% on total	3.0%	on	₹ 24,341.00	₹ 730.23
				Total	₹ 25,071.23
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 25,071.23	₹ 3,760.68
		Total cost for 100 metre			₹ 29,562.14
		Total cost for 1 metre			₹ 295.62
		Say,			₹ 295.60

17.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound, as directed by Engineer-in-Charge and consisting of applying :				
	(a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.				
	(b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
	Cement = 10 x (0.488+0.242) = 7.30Kg Sealing fillets = 10 x 0.5 = 5.00Kg Total = 12.30Kg = 0.012 tonne				
03001	Portland Cement	tonne	0.012	₹ 6,100.00	₹ 73.20
	Bonding material = 1.6 kg x 30 x 2 = 96.00Kg Bitumen (blown/ residual type) = 10 x (0.25 + 0.126) = 3.79Kg Sealing fillets = 10 x 0.10 kg/sqm = 1.00Kg Wastage @ 5% on 4.79Kg = 0.24Kg Total = 5.03Kg Say 5.00Kg				
17018	Polymer modified cementation coating	kg	5.000	₹ 170.00	₹ 850.00
	b. Carriage of cement:				
0421	Portland Cement	tonne	0.012	₹ 110.94	₹ 1.33
	c. Labour:				
0218*	Mason (average)	Day	2.000	₹ 400.00	₹ 800.00
0203	Belder	Day	2.000	₹ 300.00	₹ 600.00
0205	Waterman	Day	0.250	₹ 300.00	₹ 75.00
				Total	₹ 2,399.53
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 2,399.53	₹ 24.00
				Total	₹ 2,423.53
	e. Sundries & contingencies in/c cost of brushes etc. : @ 4.0% on total	4.0%	on	₹ 2,423.53	₹ 96.94
				Total	₹ 2,520.47
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 2,520.47	₹ 378.07
		Total cost for 10 sqm			₹ 2,898.54
		Total cost for 1 sqm			₹ 289.85
		Say,			₹ 289.90

17.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound, as directed by Engineer-in-Charge and consisting of applying :				
	(a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm.				
	(b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm.				
	(c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and fine sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around.				
	(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately). For the purpose of measurement the entire treated surface will be measured.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
	Cement = 10 x (1.289 + 0.488) = 17.77Kg Sealing fillets @ 10%= 1.77Kg Total = 19.54Kg = 0.020 tonne				
03001	Portland Cement	tonne	0.020	₹ 6,100.00	₹ 122.00
	Bonding material = 1.6 kg x 30 x 2 = 96.00Kg Bitumen (blown/ residual type) = 10 x (0.253 + 0.67) = 9.23Kg Wastage @ 5% = 0.46Kg Total = 9.69Kg				
17018	Polymer modified cementation coating	kg	9.690	₹ 170.00	₹ 1,647.30

	Fibre Glass cloth = 10.00 Sqm Wastage @ 10% = 1.00 Sqm Total = 11.00 Sqm				
17019	Fibre Glass cloth	sqm	11.000	₹ 55.00	₹ 605.00
	b. Carriage of cement:				
0421	Cement	tonne	0.020	₹ 110.94	₹ 2.22
	c. Labour:				
0218*	Mason (average)	Day	2.000	₹ 400.00	₹ 800.00
0203	Belder	Day	1.000	₹ 300.00	₹ 300.00
0205	Waterman	Day	0.250	₹ 300.00	₹ 75.00
				Total	₹ 3,551.52
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 3,551.52	₹ 35.52
				Total	₹ 3,587.04
	e. Sundries & contingencies in/c cost of brushes etc. : @ 4.0% on total	4.0%	on	₹ 3,587.04	₹ 143.48
				Total	₹ 3,730.52
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 3,730.52	₹ 559.58
		Total cost for 10 sqm			₹ 4,290.10
		Total cost for 1 sqm			₹ 429.01
				Say,	₹ 429.00

17.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc, as directed by Engineer-in-Charge and consisting of following operations:				
	(a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
	(b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 fine sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 fine sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
	(c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge.				
	(d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 fine sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
	(e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
17.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	i) Cement slurry				
03001	Portland Cement	tonne	0.0275	₹ 6,100.00	₹ 167.75
	ii) Cement mortar 1:5 (1 cement : 5 fine sand)				
3.1.5	Rate as per Item No. 3.1.5 of SH : Mortar	cum	0.224	₹ 2,749.90	₹ 615.98
	i) Roof treatment with brick bats and cement mortar				
	a. Materials:				
20038	Brick Aggregate (single size) : 63mm nominal size	cum	0.940	₹ 2,500.00	₹ 2,350.00
0404	Carriage of brick aggregate	cum	0.940	₹ 172.74	₹ 162.38
	Cement mortar 1:5 (1 cement : 5 fine sand)				
3.1.5	Rate as per Item No. 3.1.5 of SH : Mortar	cum	0.500	₹ 2,749.90	₹ 1,374.95
	b. Labour:				
0203	Belder	Day	1.750	₹ 300.00	₹ 525.00
0205	Waterman	Day	0.280	₹ 300.00	₹ 84.00
0219	Mason (brick layer) 1st class	Day	0.050	₹ 425.00	₹ 21.25
0220	Mason (brick layer) 2nd class	Day	0.050	₹ 380.00	₹ 19.00
0224	Mate	Day	0.040	₹ 300.00	₹ 12.00
	Extra labour for ramming				
0203	Belder	Day	0.250	₹ 300.00	₹ 75.00
	iv) Cement slurry				
03001	Portland Cement	tonne	0.0275	₹ 6,100.00	₹ 167.75
0203	Belder	Day	0.200	₹ 300.00	₹ 60.00
	v) 20mm Cement plaster 1:4 (1 cement : 4 fine sand)				
12.3.2	Rate as per Item No. 12.3.2 of SH : Finishing A	sqm	10.000	₹ 209.60	₹ 2,096.00
	vi) Water proofing compound (27.50+27.50+69.40+124.00 =) 248.40 kg @ 1 kg per bag of cement				
04015	Water proofing materials	kg	5.000	₹ 36.00	₹ 180.00
	Extra for making chequers for 10 sqm				
17011	Fibre glass tissue reinforcement Type II Grade I	Sqm.	10.500	₹ 105.00	₹ 1,102.50
0220	Mason (brick layer) 2nd class	Day	0.360	₹ 380.00	₹ 136.80

0203	Belder	Day	0.360	₹	300.00	₹	108.00
0220	Mason (brick layer) 2nd class	Day	0.540	₹	380.00	₹	205.20
0203	Belder	Day	0.540	₹	300.00	₹	162.00
0205	Waterman	Day	0.450	₹	300.00	₹	135.00
					Total	₹	9,760.56
	c. Water charges : @ 1.0% on total except A	1.0%	on	₹	7,664.56	₹	76.65
					Total	₹	9,837.21
	d. Sundries & contingencies in/c cost of labour for laying 20mm bed layer: @ 3.0% on total except A	3.0%	on	₹	7,741.21	₹	232.24
					Total	₹	10,069.45
	e. Contractor's profit & overheads: @ 15.0% on total except A	15.0%	on	₹	7,973.45	₹	1,196.02
		Total cost for 10 sqm				₹	11,497.71
		Total cost for 1 sqm				₹	1,149.77
		Say,				₹	1,149.80

17.8	Providing and laying four courses water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45 Kg per square metre of area for each course, second course of roofing felt type 3 grade-I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6 mm and down size or peasized gravel spread at 6 cubic decimeter per square metre, including preparation of surface but excluding grading complete as required as per direction of the Engineer-in-charge with :				
17.8.1	Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	Blown or / and residual bitumen applied hot = 2x1.45x30 = 87 kg				
05006	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	0.087	₹ 36,820.00	₹ 3,203.34
	Hessian felt type 3 Grade I (hessian base self finished bitumen felt) = 30 sqm Add for overlapping @ 10% = 3.00sqm Total = 33 sqm				
06003	Bitumen felt : Type 3 grade I	sqm	33.000	₹ 85.00	₹ 2,805.00
04009	Stone grit 6mm and down size or pea sized gravel = 30x6 = 180 cudm	cum	0.180	₹ 3,750.00	₹ 675.00
04012	Coal (steam) = 2 quintal/t of bitumen = 2x0.087 = 0.174q	quintal	0.174	₹ 890.00	₹ 154.86
	b. Carriage :				
0472	Tar/ Bitumen = 0.087 + 2.7x0.001x33 = 0.162t	tonne	0.162	₹ 110.94	₹ 17.97
0405	Stone aggregate below 40mm nominal size	cum	0.180	₹ 159.75	₹ 28.76
0467	Coal (steam)	tonne	0.017	₹ 110.94	₹ 1.93
	c. Labour:				
0227	Painter	Day	2.160	₹ 340.00	₹ 734.40
0203	Belder	Day	3.240	₹ 300.00	₹ 972.00
0225	Mistry	Day	0.180	₹ 380.00	₹ 68.40
				Total	₹ 8,661.66
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 8,661.66	₹ 86.62
				Total	₹ 8,748.28
	e. Sundries & contingencies in/c cost Preparing roof surface, cutting groove and making good etc. & cost of brushes etc. : @ 5.0% on total	5.0%	on	₹ 8,748.28	₹ 437.41
				Total	₹ 9,185.69
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 8,748.28	₹ 1,312.24
		Total cost for 30 sqm			₹ 10,497.93
		Total cost for 1 sqm			₹ 349.93
				Say,	₹ 349.90

17.9	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth course of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45, 1.20 and 1.45 Kg per square metre of area respectively, second and fourth courses of roofing felt type 3 grade I conforming to IS : 1322 (Hessian based self finished bitumen felt) ,sixth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic decimeter per sqm including preparation of surface but excluding grading, complete as required as per direction of the Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	Blown or / and residual bitumen applied hot = $(1.45 + 1.2 + 1.45) \times 30 = 123$ kg				
05006	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	0.123	₹ 36,820.00	₹ 4,528.86
	Hessian felt type 3 Grade I (hessian base self finished bitumen felt) = 60 sqm Add for overlapping @ 10% = 6.00sqm Total = 66 sqm				
06003	Bitumen felt : Type 3 grade I	sqm	66.000	₹ 85.00	₹ 5,610.00

04009	Stone grit 6mm and down size or pea sized gravel = 30x6 = 180 cudm	cum	0.180	₹ 3,750.00	₹ 675.00
04012	Coal (steam) = 2 quintal/t of bitumen = 2x0.123 = 0.246q	quintal	0.246	₹ 890.00	₹ 218.94
	b. Carriage :				
0472	Tar/ Bitumen = 0.123 + 2.7x0.001x66 = 0.273t	tonne	0.273	₹ 110.94	₹ 30.29
0405	Stone aggregate below 40mm nomial size	cum	0.180	₹ 159.75	₹ 28.76
0467	Coal (steam)	tonne	0.025	₹ 110.94	₹ 2.73
	c. Labour:				
0227	Painter	Day	3.240	₹ 340.00	₹ 1,101.60
0203	Belder	Day	4.860	₹ 300.00	₹ 1,458.00
0225	Mistry	Day	0.200	₹ 380.00	₹ 76.00
				Total	₹ 13,730.18
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 13,730.18	₹ 137.30
				Total	₹ 13,867.48
	e. Sundries & contingencies in/c cost Preparing roof surface, cutting groove and making good etc. & cost of brushes etc. : @ 5.0% on total	5.0%	on	₹ 13,867.48	₹ 693.37
				Total	₹ 14,560.85
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 13,867.48	₹ 2,080.12
		Total cost for 30 sqm			₹ 16,640.97
		Total cost for 1 sqm			₹ 554.70
				Say,	₹ 554.70

17.10	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blown or / and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade I (fibre base self finished bitumen felt) six and final courses of stone grit 6 mm and down size or pea sized gravel spread at 6cu.dm per sqm including preparation of surface, excluding grading, complete as required as per direction of the Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	Blown or / and residual bitumen applied hot = (1.45 + 1.2+ 1.70) x 30 = 130.5 kg				
05006	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	0.131	₹ 36,820.00	₹ 4,805.01
	Bitumen felt type 3 Grade I (fibre based self finished bitumen felt) = 60 sqm Add for overlapping @ 10% = 6.00sqm Total = 66 sqm				
17001	Bitumen felt fibre base (vegetable or animal) : As per IS 7193 Grade I	sqm	66.000	₹ 85.00	₹ 5,610.00
04009	Stone grit 6mm and down size or pea sized gravel = 30x6 = 180 cudm	cum	0.180	₹ 3,750.00	₹ 675.00
04012	Coal (steam) = 2 quintal/t of bitumen = 2x0.1305 = 0.261q	quintal	0.261	₹ 890.00	₹ 232.29
	b. Carriage :				
0472	Tar/ Bitumen = 0.1305 + 2.7x0.001x66 = 0.275t	tonne	0.275	₹ 110.94	₹ 30.51
0469	Stone aggregate below 40mm nomial size	cum	0.180	₹ 159.75	₹ 28.76
0467	Coal (steam)	tonne	0.026	₹ 110.94	₹ 2.90
	c. Labour:				
0227	Painter	Day	4.320	₹ 340.00	₹ 1,468.80
0203	Belder	Day	6.480	₹ 300.00	₹ 1,944.00
0225	Mistry	Day	0.360	₹ 380.00	₹ 136.80
				Total	₹ 14,934.07
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 14,934.07	₹ 149.34
				Total	₹ 15,083.41
	e. Sundries & contingencies in/c cost Preparing roof surface, cutting groove and making good etc. & cost of brushes etc. : @ 5.0% on total	5.0%	on	₹ 15,083.41	₹ 754.17
				Total	₹ 15,837.58
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 15,083.41	₹ 2,262.51
		Total cost for 30 sqm			₹ 18,100.09
		Total cost for 1 sqm			₹ 603.34
				Say,	₹ 603.30

17.11	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blown or / and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade II (glass fibre base self finished bitumen felt) and sixth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic decimeter per sqm including preparation of surface but excluding grading, complete as required as per direction of the Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	Blown or / and residual bitumen applied hot = (1.45 + 1.2+ 1.70) x 30 = 130.5 kg				
05006	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	0.131	₹ 36,820.00	₹ 4,805.01

	Bitumen felt type 2 Grade II (fibre based self finished bitumen felt) = 60 sqm Add for overlapping @ 10% = 6.00sqm Total = 66 sqm				
17009	Bitumen felt fibre base (vegetable or animal) : As per IS 7193 Grade II	Sqm.	66.000	₹ 95.00	₹ 6,270.00
04009	Stone grit 6mm and down size or pea sized gravel = 30x6 = 180 cu dm	cum	0.180	₹ 3,750.00	₹ 675.00
04012	Coal (steam) = 2 quintal/t of bitumen = 2x0.1305 = 0.261q	quintal	0.261	₹ 890.00	₹ 232.29
	b. Carriage :				
0472	Tar/ Bitumen = 0.1305 + 3.08x0.001x66 = 0.334t	tonne	0.334	₹ 110.94	₹ 37.05
0405	Stone aggregate below 40mm nominal size	cum	0.180	₹ 159.75	₹ 28.76
0467	Coal (steam)	tonne	0.026	₹ 110.94	₹ 2.90
	c. Labour :				
0227	Painter	Day	4.320	₹ 340.00	₹ 1,468.80
0203	Belder	Day	6.480	₹ 300.00	₹ 1,944.00
0225	Mistry	Day	0.360	₹ 380.00	₹ 136.80
				Total	₹ 15,600.61
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 15,600.61	₹ 156.01
				Total	₹ 15,756.62
	e. Sundries & contingencies in/c cost Preparing roof surface, cutting groove and making good etc. & cost of brushes etc. : @ 5.0% on total	5.0%	on	₹ 15,756.62	₹ 787.83
				Total	₹ 16,544.45
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 15,756.62	₹ 2,363.49
		Total cost for 30 sqm			₹ 18,907.94
		Total cost for 1 sqm			₹ 630.26
				Say,	₹ 630.30

17.12	Supplying and applying bituminous solution primer on roof and / or wall surface at 0.24 litre per sqm. as required as per direction of the Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
17002	Bitumen solution primer of approved quality	litre	2.400	₹ 60.00	₹ 144.00
	b. Labour :				
0227	Painter	Day	0.170	₹ 340.00	₹ 57.80
0203	Belder	Day	0.170	₹ 300.00	₹ 51.00
				Total	₹ 252.80
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 252.80	₹ 2.53
				Total	₹ 255.33
	d. Sundries & contingencies in/c cost of carriage of Bitumen solution primer of approved quality & cost of brushes etc. : @ 10.0% on total	10.0%	on	₹ 255.33	₹ 25.53
				Total	₹ 280.86
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 255.33	₹ 38.30
		Total cost for 10 sqm			₹ 319.16
		Total cost for 1 sqm			₹ 31.92
				Say,	₹ 31.90

17.13	Deduct for omitting in water proofing treatment final course of spreading stone grit 6 mm down size or pea sized gravel as per direction of the Engineer-in-charge:				
17.13.1	at 6 cu dm per sqm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
04009	Stone grit 6 mm and down size or pea sized gravel = 6x10 = 60 cu dm	cum	0.060	₹ 3,750.00	₹ 225.00
	b. Carriage :				
0405	Stone aggregate below 40mm nominal size	cum	0.060	₹ 159.75	₹ 9.59
				Total	₹ 234.59
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 234.59	₹ 2.35
				Total	₹ 236.94
	d. Sundries & contingencies in/c cost of labour for screening and spreading grit & cost of brushes etc. : @ 100.0% on total	100.0%	on	₹ 236.94	₹ 236.94
				Total	₹ 473.88
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 236.94	₹ 35.54
		Total cost for 10 sqm			₹ 509.42
		Total cost for 1 sqm			₹ 50.94
				Say,	₹ 50.90

17.13.2	at 8 cu dm per sqm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				

04009	Stone grit 6 mm and down size or pea sized gravel = 8x10 = 80 cudm	cum	0.080	₹ 3,750.00	₹ 300.00
	b. Carriage :				
0405	Stone aggregate below 40mm nominal size	cum	0.080	₹ 159.75	₹ 12.78
				Total	₹ 312.78
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 312.78	₹ 3.13
				Total	₹ 315.91
	d. Sundries & contingencies in/c cost of labour for screening and spreading grit & cost of brushes etc. : @ 100.0% on total	100.0%	on	₹ 315.91	₹ 315.91
				Total	₹ 631.82
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 315.91	₹ 47.39
		Total cost for 10 sqm			₹ 679.21
		Total cost for 1 sqm			₹ 67.92
				Say,	₹ 67.90

17.14	Grading roof for water proofing treatment complete as required as per direction of the Engineer-in-charge with :				
17.14.1	Cement concrete 1:2:4 (1 cement : 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	cum			
	a. Materials:				
04006	Stone Aggregate (Single size) : 20mm nominal size	cum	0.670	₹ 3,969.00	₹ 2,659.23
04008	Stone Aggregate (Single size) : 10mm nominal size	cum	0.220	₹ 4,040.00	₹ 888.80
02003	Sand (fine) : Selected quarry	cum	0.450	₹ 370.00	₹ 166.50
03001	Portland Cement	tonne	0.320	₹ 6,100.00	₹ 1,952.00
	b. Carriage :				
0405	Stone aggregate below 40 mm nominal size	cum	0.890	₹ 159.75	₹ 142.18
0425	Sand (fine) : Selected quarry	cum	0.450	₹ 142.63	₹ 64.18
0421	Portland Cement	tonne	0.320	₹ 110.94	₹ 35.50
	c. Labour:				
0203	Belder	Day	1.630	₹ 300.00	₹ 489.00
0205	Waterman	Day	0.700	₹ 300.00	₹ 210.00
0219	Mason (brick layer) 1st class	Day	0.100	₹ 425.00	₹ 42.50
	d. Hire charges for:				
0138	Concrete Mixer 0.25 to 0.40 cum with Hopper	Day	0.070	₹ 1,350.00	₹ 94.50
0129	Vibrator (Neddle type 40mm)	Day	0.070	₹ 436.00	₹ 30.52
				Total	₹ 6,774.91
	e. Water charges : @ 1.0% on total	1.0%	on	₹ 6,774.91	₹ 67.75
				Total	₹ 6,842.66
	f. Sundries & contingencies in/c cost of labour for laying in terrace & cost of brushes etc. : @ 5.0% on total	5.0%	on	₹ 6,842.66	₹ 342.13
				Total	₹ 7,184.79
	g. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 6,842.66	₹ 1,026.40
		Total cost for 1 cum			₹ 8,211.19
				Say,	₹ 8,211.20

17.14.2	Cement mortar 1:3 (1 cement : 3 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	cum			
	a. Materials:				
	Cement mortar 1:3 (1 cement : 3 fine sand)				
3.1.3	Rate as per Item No. 3.1.3 of SH : Mortars	cum	1.000	₹ 3,992.09	₹ 3,992.09
	b. Labours:				
0218*	Mason (average)	Day	1.000	₹ 400.00	₹ 400.00
0203	Belder	Day	2.000	₹ 300.00	₹ 600.00
0205	Waterman	Day	0.500	₹ 300.00	₹ 150.00
0212	Coolie	Day	5.000	₹ 300.00	₹ 1,500.00
				Total	₹ 6,642.09
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 6,642.09	₹ 66.42
				Total	₹ 6,708.51
	d. Sundries & contingencies: @ 3.0% on total	3.0%	on	₹ 6,708.51	₹ 201.26
				Total	₹ 6,909.77
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 6,708.51	₹ 1,006.28
		Total cost for 1 cum			₹ 7,916.05
				Say,	₹ 7,916.10

17.14.3	Cement mortar 1:4 (1cement : 4 fine sand)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 cum.	cum			
	a. Materials:				
	Cement mortar 1:4 (1 cement : 4 fine sand)				
3.1.4	Rate as per Item No. 3.1.4 of SH : Mortar	cum	1.000	₹ 3,184.67	₹ 3,184.67
	b. Labours:				
0218*	Mason (average)	Day	1.000	₹ 400.00	₹ 400.00
0203	Belder	Day	2.000	₹ 300.00	₹ 600.00
0205	Waterman	Day	0.500	₹ 300.00	₹ 150.00
0212	Coolie	Day	5.000	₹ 300.00	₹ 1,500.00
				Total	₹ 5,834.67

	c. Water charges : @ 1.0% on total	1.0%	on	₹ 5,834.67	₹ 58.35
				Total	₹ 5,893.02
	d. Sundries & contingencies: @ 3.0% on total	3.0%	on	₹ 5,893.02	₹ 176.79
				Total	₹ 6,069.81
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 5,893.02	₹ 883.95
		Total cost for 1 cum			₹ 6,953.76
			Say,	₹	6,953.80

17.15	Providing and laying in situ seven course water proofing treatment with APP (Atactic poly-propylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5 mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) as per direction of the Engineer-in-Charge and finished neat (item of laying brick tiles shall be paid for separately).				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	APP modified polymeric felt (two layers) 1.5mm thick = 3x30 = 60sqm Add 10% for wastage = 6.0 sqm Total = 66 sqm				
17015	APP modified polymeric felt (two layers) 1.5mm thick	Sqm.	66.000	₹ 90.00	₹ 5,940.00
17002	Bitumen solution primer of approved quality = 0.4x30 = 12sqm	litre	12.000	₹ 60.00	₹ 720.00
05006	Blown type petroleum bitumen of penetration 85/25 of approved quality 3 x 36 = 108kg = 0.108 tonne	tonne	0.108	₹ 36,820.00	₹ 3,976.56
04012	Coal (steam)	quintal	0.174	₹ 890.00	₹ 154.86
	b. Carriage :				
0472	Tar/ Bitumen	tonne	0.120	₹ 110.94	₹ 13.31
0467	Coal (steam)	tonne	0.017	₹ 110.94	₹ 1.93
	c. Labour:				
0227	Painter	Day	2.160	₹ 340.00	₹ 734.40
0203	Belder	Day	3.240	₹ 300.00	₹ 972.00
0225	Mistry	Day	0.180	₹ 380.00	₹ 68.40
				Total	₹ 12,581.46
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 12,581.46	₹ 125.81
				Total	₹ 12,707.27
	e. Sundries & contingencies in/c cost for Preparing roof surface & cutting grooves and making good, cost for carriage of Polymeric felt & cost for brushes etc. : @ 4.5% on total	4.5%	on	₹ 12,707.27	₹ 571.83
				Total	₹ 13,279.10
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 12,707.27	₹ 1,906.09
		Total cost for 30 Sqm.			₹ 15,185.19
		Total cost for 1 Sqm.			₹ 506.17
			Say,	₹	506.20

17.16	Providing and laying in situ five course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40Kg per sqm, 2nd & 4th courses of bonding material @ 1.20 kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd layer of roofing membrane APP modified Polymeric membrane 2.0 mm thick of 3.00 Kg/ sqm weight consisting of five layers prefabricated with centre core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 5th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) as per direction of the Engineer-in-Charge and finished neat (item of laying brick tiles shall be paid for separately).				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	A.P.P. modified polymeric felt (two layers) 2mm thick = 30sqm Add 10% for wastage = 3.0 sqm Total = 33 sqm				
17016	APP modified polymeric felt (two layers) 2mm thick	Sqm.	33.000	₹ 120.00	₹ 3,960.00
17002	Bitumen solution primer of approved quality = 0.4x30 = 12sqm	litre	12.000	₹ 60.00	₹ 720.00
05006	Blown type petroleum bitumen of penetration 85/25 of approved quality 1.20x30x2 = 72kg = 0.072 tonne	tonne	0.072	₹ 36,820.00	₹ 2,651.04
04012	Coal (steam)	quintal	0.174	₹ 890.00	₹ 154.86

	b. Carriage :				
0472	Tar/ Bitumen	tonne	0.084	₹ 110.94	₹ 9.32
0467	Coal (steam)	tonne	0.017	₹ 110.94	₹ 1.93
	c. Labour:				
0227	Painter	Day	1.580	₹ 340.00	₹ 537.20
0203	Belder	Day	2.370	₹ 300.00	₹ 711.00
0225	Mistry	Day	0.130	₹ 380.00	₹ 49.40
				Total	₹ 8,794.75
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 8,794.75	₹ 87.95
				Total	₹ 8,882.70
	e. Sundries & contingencies in/c cost for Preparing roof surface & cutting grooves and making good, cost for carriage of Polymeric felt & cost for brushes etc. : @ 4.5% on total	4.5%	on	₹ 8,882.70	₹ 399.72
				Total	₹ 9,282.42
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 8,882.70	₹ 1,332.41
		Total cost for 30 Sqm.			₹ 10,614.83
		Total cost for 1 Sqm.			₹ 353.83
				Say,	₹ 353.80

17.17	Providing and laying in situ seven course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 2.0 mm thick of 3.00 Kg/sqm weight consisting of five layers prefabricated with centre core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) as per direction of the Engineer-in-Charge and finished neat (item of laying brick tiles shall be paid for separately).				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	A.P.P. modified polymeric felt (two layers) 2mm thick = 3x30 = 60sqm Add 10% for wastage = 6.0 sqm Total = 66 sqm				
17016	APP modified polymeric felt (two layers) 2mm thick	Sqm.	66.000	₹ 120.00	₹ 7,920.00
17002	Bitumen solution primer of approved quality = 0.4x30 = 12sqm	litre	12.000	₹ 60.00	₹ 720.00
05006	Blown type petroleum bitumen of penetration 85/25 of approved quality 3 course x 36 = 108 kg = 0.108 tonne	tonne	0.108	₹ 36,820.00	₹ 3,976.56
04012	Coal (steam)	quintal	0.174	₹ 890.00	₹ 154.86
	b. Carriage :				
0472	Tar/ Bitumen	tonne	0.120	₹ 110.94	₹ 13.31
0467	Coal (steam)	tonne	0.017	₹ 110.94	₹ 1.93
	c. Labour:				
0227	Painter	Day	2.160	₹ 340.00	₹ 734.40
0203	Belder	Day	3.240	₹ 300.00	₹ 972.00
0225	Mistry	Day	0.180	₹ 380.00	₹ 68.40
				Total	₹ 14,561.46
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 14,561.46	₹ 145.61
				Total	₹ 14,707.07
	e. Sundries & contingencies in/c cost for Preparing roof surface & cutting grooves and making good, cost for carriage of Polymeric felt & cost for brushes etc. : @ 4.5% on total	4.5%	on	₹ 14,707.07	₹ 661.82
				Total	₹ 15,368.89
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 14,707.07	₹ 2,206.06
		Total cost for 30 Sqm.			₹ 17,574.95
		Total cost for 1 Sqm.			₹ 585.83
				Say,	₹ 585.80

17.18	Providing and fixing APP (Atactic Polypropylene Polymer) modified prefabricated five layer 2 mm thick water proofing membrance, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrance manufacture of density at 25°C, 0.87 - 0.89 kg/ litre and viscosity 70 - 160 cps. Over the primer coat the layer of membrance shall be laid using Butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrance shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/ 5 cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrance not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147 as per direction of the Engineer-in-Charge. The laying of membrance shall be got done through the authorised applicator of the manufacture of membrance.				
17.18.1	2mm (for corrugated roof sheets)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			

	a. Materials:				
	APP. modified 3mm thick = 30 sqm Add 10% for wastage = 3.0 sqm Total = 33 sqm				
17003	APP modified 2 mm thick membrane reinforced with glass fibre matt	Sqm.	33.000	₹ 120.00	₹ 3,960.00
17017	Bitumen primer for bitumen membrane	litre	12.000	₹ 110.00	₹ 1,320.00
17004	Commercial LPG in cylinder	kg	7.000	₹ 75.00	₹ 525.00
	b. Carriage :				
0472	Tar/ Bitumen	tonne	0.012	₹ 110.94	₹ 1.33
	c. Labour:				
0229	Skilled torch operator for laying tack	Day	2.160	₹ 425.00	₹ 918.00
0225	Mistry	Day	0.180	₹ 380.00	₹ 68.40
0203	Belder	Day	3.240	₹ 300.00	₹ 972.00
				Total	₹ 7,764.73
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 7,764.73	₹ 77.65
				Total	₹ 7,842.38
	e. Sundries & contingencies in/c cost for Preparing roof surface & cutting grooves, cost for carriage of Bitumen membrane, Fuel & cost for brushes & bitumen torch etc. : @ 4.5% on total	4.5%	on	₹ 7,842.38	₹ 352.91
				Total	₹ 8,195.29
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 7,842.38	₹ 1,176.36
		Total cost for 30 Sqm.			₹ 9,371.65
		Total cost for 1 Sqm.			₹ 312.39
				Say,	₹ 312.40

17.19	proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufactured of density at 25°C, 0.87 - 0.89 kg/litre and viscosity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5 cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147 as per direction of the Engineer-in-Charge. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane as required as per direction of the Engineer-in-charge.				
17.19.1	3 mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	APP modified 3mm thick = 30 sqm Add 10% for wastage = 3.0 sqm Total = 33 sqm				
17005	APP modified 3 mm thick membrane reinforced with glass fibre matt	Sqm.	33.000	₹ 240.00	₹ 7,920.00
17017	Bitumen primer for bitumen membrane	litre	12.000	₹ 110.00	₹ 1,320.00
17004	Commercial LPG in cylinder	kg	7.000	₹ 75.00	₹ 525.00
	b. Carriage :				
0472	Tar/ Bitumen	tonne	0.012	₹ 110.94	₹ 1.33
	c. Labour:				
0229	Skilled torch operator for laying tack	Day	2.160	₹ 425.00	₹ 918.00
0225	Mistry	Day	0.180	₹ 380.00	₹ 68.40
0203	Belder	Day	3.240	₹ 300.00	₹ 972.00
				Total	₹ 11,724.73
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 11,724.73	₹ 117.25
				Total	₹ 11,841.98
	e. Sundries & contingencies in/c cost for Preparing roof surface & cutting grooves, cost for carriage of Bitumen membrane, Fuel & cost for brushes & bitumen torch etc. : @ 4.5% on total	4.5%	on	₹ 11,841.98	₹ 532.89
				Total	₹ 12,374.87
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 12,374.87	₹ 1,856.23
		Total cost for 30 Sqm.			₹ 14,231.10
		Total cost for 1 Sqm.			₹ 474.37
				Say,	₹ 474.40

17.20	Providing and laying APP (Atactic Polypropylene Polymer) modified precasted five layer 3 mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ litre and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc, and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 650/ 450N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147 as per direction of the Engineer-in-Charge. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane as required as per direction of the Engineer-in-charge :				
17.20.1	3 mm thick				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	APP modified 3mm thick = 30 sqm Add 10% for wastage = 3.0 sqm Total = 33 sqm				
17007	APP modified 3 mm thick membrane reinforced with polyester matt	Sqm.	33.000	₹ 245.00	₹ 8,085.00
17017	Bitumen primer for bitumen membrane	litre	12.000	₹ 110.00	₹ 1,320.00
17004	Commercial LPG in cylinder	kg	7.000	₹ 75.00	₹ 525.00
	b. Carriage :				
0472	Tar/ Bitumen	tonne	0.012	₹ 110.94	₹ 1.33
	c. Labour:				
0229	Skilled torch operator for laying tack	Day	2.160	₹ 425.00	₹ 918.00
0225	Mistry	Day	0.180	₹ 380.00	₹ 68.40
0203	Belder	Day	3.240	₹ 300.00	₹ 972.00
				Total	₹ 11,889.73
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 11,889.73	₹ 118.90
				Total	₹ 12,008.63
	e. Sundries & contingencies in/c cost for Preparing roof surface & cutting grooves, cost for carriage of Bitumen membrane, Fuel & cost for brushes & bitumen torch etc. : @ 4.5% on total	4.5%	on	₹ 12,008.63	₹ 540.39
				Total	₹ 12,549.02
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 12,008.63	₹ 1,801.29
				Total cost for 30 Sqm.	₹ 14,350.31
				Total cost for 1 Sqm.	₹ 478.34
				Say,	₹ 478.30

17.21	Extra for covering top of membrane with Geotextile, 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation and as required as per direction of the Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 Sqm.	sqm			
	a. Materials:				
	Geotextile 120gsm membrane = 30 sqm Add 5% for wastage = 1.50 sqm Total = 31.50 sqm				
17006	Geotextile 120 grams per sqm membrane	Sqm.	31.500	₹ 55.00	₹ 1,732.50
	b. Labour:				
0229	Skilled torch operator for laying tack or fitter = 2.16/5 = 0.43	Day	0.430	₹ 425.00	₹ 182.75
0225	Mistry = 0.18/5 = 0.04	Day	0.040	₹ 380.00	₹ 15.20
0203	Belder = 3.24/5 = 0.65	Day	0.650	₹ 300.00	₹ 195.00
				Total	₹ 2,125.45
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 2,125.45	₹ 21.25
				Total	₹ 2,146.70
	d. Sundries & contingencies in/c cost for carriage of Geotextile & cost for brushes & bitumen torch etc. : @ 7.5% on total	7.5%	on	₹ 2,146.70	₹ 161.00
				Total	₹ 2,307.70
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 2,307.70	₹ 346.16
				Total cost for 30 Sqm.	₹ 2,653.86
				Total cost for 1 Sqm.	₹ 88.46
				Say,	₹ 88.50

17.22	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/ system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			

	a. Materials:				
17020	Fibre reinforced elastomeric liquid waterproofing membrane = 10.76 litre + 0.538 (add wastage @ 5%) = 11.30 litre	litre	11.300	₹ 240.00	₹ 2,712.00
	b. Labour:				
0212	Coolie	Day	0.670	₹ 300.00	₹ 201.00
0227	Painter	Day	0.670	₹ 340.00	₹ 227.80
				Total	₹ 3,140.80
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 3,140.80	₹ 31.41
				Total	₹ 3,172.21
	d. Sundries & contingencies in/c cost for Carriage of materials, cost of Wire brush, brushes, rollers etc. etc. : @ 4.0% on total	4.0%	on	₹ 3,172.21	₹ 126.89
				Total	₹ 3,299.10
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 3,299.10	₹ 494.87
		Total cost for 10 Sqm			₹ 3,793.97
		Total cost for 1 Sqm			₹ 379.40
		Say,			₹ 379.40

17.23	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush as required as per direction of the Engineer-in-charge. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the Engineer-in-charge. The product performance shall carry guaranteed for 10 years against any leakage.				
17.23.1	For vertical surface two coats @0.70 kg per sqm per coat				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	sqm			
	a. Materials:				
17021	Inegral crystalline slurry = 2 x 0.70 kg/Sq.mtr.= 1.40kg	kg	1.400	₹ 325.00	₹ 455.00
				Total	₹ 455.00
	b. Water charges : @ 1.0% on total	1.0%	on	₹ 455.00	₹ 4.55
				Total	₹ 459.55
	c. Sundries & contingencies in/c cost for Carriage of materials & tools, labours for application of waterproofing material etc. : @ 7.5% on total	7.5%	on	₹ 459.55	₹ 34.47
				Total	₹ 494.02
	d. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 494.02	₹ 74.10
		Total cost for 1 Sqm			₹ 568.12
		Say,			₹ 568.10

17.23.2	For horizontal surface one coat @1.10 kg per sqm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1.00 Sqm.	sqm			
	a. Materials:				
17021	Inegral crystalline slurry = 1 x 1.10 kg/Sq.mtr.= 1.10kg	kg	1.100	₹ 325.00	₹ 357.50
				Total	₹ 357.50
	b. Water charges : @ 1.0% on total	1.0%	on	₹ 357.50	₹ 3.58
				Total	₹ 361.08
	c. Sundries & contingencies in/c cost for Carriage of materials & tools, labours for application of waterproofing material etc. : @ 7.5% on total	7.5%	on	₹ 361.08	₹ 27.08
				Total	₹ 388.16
	d. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 388.16	₹ 58.22
		Total cost for 1.00 Sqm			₹ 446.38
		Say,			₹ 446.40

17.24	Providing & Applying polymer modified, flexible cementitious negative side waterproofing coating with elastic waterproofing polymers on interior wall plaster surface in three coats @14.35kg /10 sqm. one coat of self priming of cementitious waterproofing polymer(dilution with water in the ratio of 1:1) and two coats of cementitious waterproofing polymer (dilution with water in the ratio of 3:1) after scrapping and properly cleaning the surface to remove pre-existing paint film & loose particles till plaster is visible, complete in all respect as per the direction of Engineer-in-Charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
17025	Cementitious water coating with elastic polymers = 14.35 litre + 0.72 (add wastage @ 5%) = 15.07 litre	litre	15.070	₹ 225.00	₹ 3,390.75
	b. Labours:				
0212	Coolie	Day	0.230	₹ 300.00	₹ 69.00

0227	Painter	Day	0.460	₹ 340.00	₹ 156.40
				Total	₹ 3,616.15
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 3,616.15	₹ 36.16
				Total	₹ 3,652.31
	d. Sundries & contingencies in/c cost for Carriage of materials, labours for Wire brush, brushes, rollers etc. : @ 4.0% on total	4.0%	on	₹ 3,652.31	₹ 146.09
				Total	₹ 3,798.40
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 3,798.40	₹ 569.76
		Total cost for 10 Sqm			₹ 4,368.16
		Total cost for 1 Sqm			₹ 436.82
				Say,	₹ 436.80

17.25	Providing and applying Crystalline mortar by mixing in the ratio of 4.5 : 1 (4.5 parts Crystalline mortar : 1 part water) for the treatment of faulty construction joints, cracks, tie rod holes and spalled & honeycombed surface of RCC underground structures like basement, water tanks, bridge deck etc. to ensure water tightness. The crystalline mortar shall conform to the EN 1504-3 having compressive strength Class R4 > 45 MPa and adhesive bond strength Class R3 > 1.5 MPa. The work shall be carried out all complete as per specification and the direction of the Engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.				

17.25.1	For sealing cracks and faulty construction joints, by preparing the surface, making U-shape groove size of 25x25mm and then priming the surface with integral crystalline slurry @0.05kg per running meter and while the surface is tacky then filling the groove upto top edge with crystalline mortar @1.50kg per running meter. Once crystalline mortar is touch dry then finally applying two coats of integral crystalline slurry @0.05kg per running meter per coat on treated surface.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Metre.	metre			
	a. Materials:				
17022	Crystalline Mortar @ 1.50 Kg per metre	kg	1.500	₹ 300.00	₹ 450.00
17021	Inegral crystalline slurry for priming and finishing = 3 x 0.05 kg/metre= 0.15kg	kg	0.150	₹ 325.00	₹ 48.75
				Total	₹ 498.75
	b. Water charges : @ 1.0% on total	1.0%	on	₹ 498.75	₹ 4.99
				Total	₹ 503.74
	c. Sundries & contingencies in/c cost for Carriage of materials & tools, labours for making crystalline mortar and repair work etc. : @ 10.0% on total	10.0%	on	₹ 503.74	₹ 50.37
				Total	₹ 554.11
	d. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 554.11	₹ 83.12
		Total cost for 1 metre			₹ 637.23
				Say,	₹ 637.20

17.25.2	For patching of tie rod holes, preparing tie rod hole surface and then priming the area with integral crystalline slurry @0.070kg per sqm and while the surface is tacky, repairing and then filling the tie rod holes with crystalline mortar @0.040kg per hole as required as per direction of the Engineer-in-charge. The crystalline mortar shall be tightly rodded into tie rod holes or packed tightly (For 25x25x25 mm tie rod hole, use 0.040 kg to fill the hole)				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 no. hole	Each			
	a. Materials:				
17022	Crystalline Mortar @ 0.040 Kg per hole	kg	0.040	₹ 300.00	₹ 12.00
				Total	₹ 12.00
	b. Water charges : @ 1.0% on total	1.0%	on	₹ 12.00	₹ 0.12
				Total	₹ 12.12
	c. Sundries & contingencies in/c cost for Carriage of materials & tools, labours for making crystalline mortar and repair work etc. : @ 65.0% on total	65.0%	on	₹ 12.12	₹ 7.88
				Total	₹ 20.00
	d. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 20.00	₹ 3.00
		Total cost for each hole			₹ 23.00
				Say,	₹ 23.00

17.26	Providing and applying of swellable type water stop tape, 19mm x 25mm thick in linear meter (expansive nature) for construction joints treatment of RCC structure, such as raft slab, retaining walls, water storage tank and at the junctions of raft slab with the retaining walls etc.. After cleaning the surface, one coat of required primer for swellable water stop tape shall be applied throughout the length of the joint @3.78 litre per 240 running meter. Over the primed surface swellable type water stop tape shall be placed. The work shall be carried out all complete as per specification and the direction of the Engineer-in-charge. The product performance shall carry guaranteed for 10 years against any leakage.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Metre.	sqm			
	a. Materials:				
17023	Swellable type water stop tape (Crystalline sealing compound)	metre	1.000	₹ 500.00	₹ 500.00
17024	Swellable type water stop primer (@3.78 litre per 240 running metre)	litre	0.016	₹ 2,100.00	₹ 33.08
				Total	₹ 533.08

	b. Water charges : @ 1.0% on total	1.0%	on	₹ 533.08	₹ 5.33
				Total	₹ 538.41
	c. Sundries & contingencies in/c cost for Carriage of materials & tools, labours for application of primer and swellable water stop etc. : @ 7.5% on total	7.5%	on	₹ 538.41	₹ 40.38
				Total	₹ 578.79
	d. Contractor's profit & overheads: @ 15% on total	15.0%	on	₹ 578.79	₹ 86.82
		Total cost for 1 Metre			₹ 665.61
			Say,	₹	665.60

REPAIRS AND REHABILITATION ITEMS :

17.27	Chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge.				

17.27.1	75mm average thickness				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	sqm			
	a. Labour:				
0226	Machine Operator	Day	0.200	₹ 425.00	₹ 85.00
0203	Belder	Day	0.100	₹ 300.00	₹ 30.00
				Total	₹ 115.00
	b. Water charges : @ 1.0% on total	1.0%	on	₹ 115.00	₹ 1.15
				Total	₹ 116.15
	c. Sundries & contingencies in/c Hire charges for HILTY-TE 504 Pneumatic chisel: @ 35.0% on total	35.0%	on	₹ 116.15	₹ 40.65
				Total	₹ 156.80
	d. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 156.80	₹ 23.52
		Total cost for 1 Sqm			₹ 180.32
			Say,	₹	180.30

17.27.2	50mm average thickness				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	sqm			
	a. Labour:				
0226	Machine Operator	Day	0.130	₹ 425.00	₹ 55.25
0203	Belder	Day	0.070	₹ 300.00	₹ 21.00
				Total	₹ 76.25
	b. Water charges : @ 1.0% on total	1.0%	on	₹ 76.25	₹ 0.76
				Total	₹ 77.01
	c. Sundries & contingencies in/c Hire charges for HILTY-TE 504 Pneumatic chisel: @ 35.0% on total	35.0%	on	₹ 77.01	₹ 26.95
				Total	₹ 103.96
	d. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 103.96	₹ 15.59
		Total cost for 1 Sqm			₹ 119.55
			Say,	₹	119.60

17.27.3	25 mm average thickness				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 Sqm.	sqm			
	a. Labour:				
0226	Machine Operator	Day	0.070	₹ 425.00	₹ 29.75
0203	Belder	Day	0.030	₹ 300.00	₹ 9.00
				Total	₹ 38.75
	b. Water charges : @ 1.0% on total	1.0%	on	₹ 38.75	₹ 0.39
				Total	₹ 39.14
	c. Sundries & contingencies in/c Hire charges for HILTY-TE 504 Pneumatic chisel: @ 35.0% on total	35.0%	on	₹ 39.14	₹ 13.70
				Total	₹ 52.84
	d. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 52.84	₹ 7.93
		Total cost for 1 Sqm			₹ 60.77
			Say,	₹	60.80

17.28	Cleaning of reinforcement from rust from the reinforcing bars to give it a total rust free steel surface by using alkaline chemical rust remover of approved make with paint brush and removing loose particles after 24 hours of its application with wire brush and thoroughly washing with water and allowing it to dry, all complete as per direction of Engineer-In-Charge.				

17.28.1	Bars upto 12 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3 Sqm (95.54 metre length of 10mm dia bar)	sqm			
	Bars upto 12mm diameter (1 litre chemical shall cover 3.00 sqm area of bars)				
	a. Materials:				
17026	Chemical Rust Remover	metre	1.000	₹ 240.00	₹ 240.00
	b. Labour: (Application charges for 3.0 sqm)				

0227	Painter	Day	0.162	₹ 340.00	₹ 55.08
0212	Coolie	Day	0.162	₹ 300.00	₹ 48.60
				Total	₹ 343.68
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 343.68	₹ 3.44
				Total	₹ 347.12
	d. Sundries & contingencies in/c cost of putty, brush and sand paper etc. : @ 3.0% on total	3.0%	on	₹ 347.12	₹ 10.41
				Total	₹ 357.53
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 357.53	₹ 53.63
		Total cost for 3 Sqm (95.54 metre length of 10mm dia bar)			₹ 411.16
		Total cost for 1 Metre length of bar			₹ 4.30
				Say,	₹ 4.30

17.28.2	Bars above 12 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 3 Sqm (47.78 metre length of 20mm dia bar) Bars above 12mm diameter (1 litre chemical shall cover 3.00 sqm area of bars)	sqm			
	a. Materials:				
17026	Chemical Rust Remover	metre	1.000	₹ 240.00	₹ 240.00
	b. Labour: (Application charges for 3.0 sqm)				
0227	Painter	Day	0.162	₹ 340.00	₹ 55.08
0212	Coolie	Day	0.162	₹ 300.00	₹ 48.60
				Total	₹ 343.68
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 343.68	₹ 3.44
				Total	₹ 347.12
	d. Sundries & contingencies in/c cost of putty, brush and sand paper etc. : @ 3.0% on total	3.0%	on	₹ 347.12	₹ 10.41
				Total	₹ 357.53
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 357.53	₹ 53.63
		Total cost for 3 Sqm (47.78 metre length of 20mm dia bar)			₹ 411.16
		Total cost for 1 Metre length of bar			₹ 8.61
				Say,	₹ 8.60

17.29	Drilling suitable holes in reinforced or plain cement concrete with power driven drill machine to a minimum depth of 100mm upto 200mm in RCC beams, lintels, columns and slabs to introduce steel bars for sunshades/balconies including fixing the steel bars in position using epoxy resin anchor grout of approved make but excluding the cost of reinforcement, all complete as per direction of Engineer-In- Charge.				
17.29.1	Upto and including 12mm dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos. hole	Each			
	a. Materials:				
17027	Approx unit weight of Epoxy = 2000 kg/cum or 2 gm/cucm Volume of Epoxy filled = $3.14/4 [(1.5)^2 - (1.2)^2] \times 15.5\text{cm} = 9.86\text{cucm}$ Weight of Epoxy for 10 holes = $10 \times 9.86 \times 2 = 197.20\text{ gms}$ say 200gms = 0.2 kg	kg	0.200	₹ 660.00	₹ 132.00
	b. Machinery:				
0140	Hire charges of Drill machine upto 30mm dia	Day	0.500	₹ 185.00	₹ 92.50
	c. Labours:				
0215	Fitter (grade1)	Day	0.500	₹ 380.00	₹ 190.00
0203	Belder	Day	0.500	₹ 300.00	₹ 150.00
				Total	₹ 564.50
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 564.50	₹ 5.65
				Total	₹ 570.15
	e. Sundries & contingencies: @ 3.0% on total	3.0%	on	₹ 570.15	₹ 17.10
				Total	₹ 587.25
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 587.25	₹ 88.09
		Total cost for 10 holes			₹ 675.34
		Total cost for each hole			₹ 67.53
				Say,	₹ 67.50

17.30	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and as per direction of Engineer-In-charge complete in all respect.				
17.30.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. bonding coat	sqm			
	a. Materials:				
03001	Portland Cement	tonne	0.022	₹ 6,100.00	₹ 134.20

17028	SBR Polymer @ 10% of cement weight = 22.00kg x 10% = 2.20kg	kg	2.200	₹ 215.00	₹ 473.00
	b. Labour:				
0218*	Mason (average)	Day	0.270	₹ 400.00	₹ 108.00
0212	Coolie	Day	0.270	₹ 300.00	₹ 81.00
				Total	₹ 796.20
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 796.20	₹ 7.96
				Total	₹ 804.16
	d. Sundries & contingencies in/c cost of scaffolding : @ 3.0% on total	3.0%	on	₹ 804.16	₹ 24.12
				Total	₹ 828.28
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 828.28	₹ 124.24
				Total cost for 10 Sqm	₹ 952.52
				Total cost for 1 Sqm	₹ 95.25
				Say,	₹ 95.30

17.30.2	Epoxy bonding adhesive having coverage 2.20 sqm/kg of approved make				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 2.20 Sqm. bonding coat	sqm			
	a. Materials:				
17027	Epoxy	kg	1.000	₹ 660.00	₹ 660.00
				Total	₹ 660.00
	b. Water charges : @ 1.0% on total	1.0%	on	₹ 660.00	₹ 6.60
				Total	₹ 666.60
	c. Sundries & contingencies in/c cost brushes etc: @ 10.0% on total	10.0%	on	₹ 666.60	₹ 66.66
				Total	₹ 733.26
	d. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 733.26	₹ 109.99
				Total cost for 2.20 Sqm	₹ 843.25
				Total cost for 1 Sqm	₹ 383.30
				Say,	₹ 383.30

17.31	Extra for providing and laying of Fibre glass cloth over bonding coat of approved adhesive as per item no. 17.30, when the coat is still green. Overlaps of joints of fibre cloth should not be less than 10 cm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
17019	Fibre Glass cloth	sqm	11.000	₹ 55.00	₹ 605.00
	c. Labour:				
0218*	Mason (average)	Day	0.050	₹ 400.00	₹ 20.00
0203	Belder	Day	0.050	₹ 300.00	₹ 15.00
0205	Waterman	Day	0.005	₹ 300.00	₹ 1.50
				Total	₹ 641.50
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 641.50	₹ 6.42
				Total	₹ 647.92
	e. Sundries & contingencies etc. : @ 3.0% on total	3.0%	on	₹ 647.92	₹ 19.44
				Total	₹ 667.36
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 667.36	₹ 100.10
				Total cost for 10 sqm	₹ 767.46
				Total cost for 1 sqm	₹ 76.75
				Say,	₹ 76.80

17.32	Providing, mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement: 4 fine sand with polymer minimum 2% by wt. of cement used) as per specifications and as per direction of the Engineer-in-charge. Note: Measurement and payment: The pre-measurement of thickness shall be done just after the surface preparation is completed and Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and/or the 75mm size cube crushing strength at the end of 28 days to be not less than 30 N/ mm ²)				
17.32.1	12 mm average thickness.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
	Cement mortar 1:4 (1 cement : 4 fine sand) = 0.144 cum				
3.1.4	Rate as per Item No. 3.1.4 of SH : Mortar	cum	0.144	₹ 3,184.67	₹ 458.59
17028	SBR Polymer Qty of cement in mortar = 0.144x0.38 = 0.055 MT or 55kg @ 2% of weight of cement 55kg x 2% = 1.10 kg	kg	1.100	₹ 215.00	₹ 236.50
	b. Labour:				
0218*	Mason (average)	Day	0.670	₹ 400.00	₹ 268.00
0212	Coolie	Day	0.750	₹ 300.00	₹ 225.00
0205	Waterman	Day	0.920	₹ 300.00	₹ 276.00
				Total	₹ 1,464.09
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 1,464.09	₹ 14.64
				Total	₹ 1,478.73

	d. Sundries & contingencies in/c cost of scaffolding : @ 4.0% on total	4.0%	on	₹ 1,478.73	₹ 59.15
				Total	₹ 1,537.88
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 1,537.88	₹ 230.68
		Total cost for 10 Sqm			₹ 1,768.56
		Total cost for 1 Sqm			₹ 176.86
			Say,	₹	176.90

17.32.2	25 mm average thickness in 2 layers.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
	Cement mortar 1:4 (1 cement : 4 fine sand) = (0.144/12)x25= 0.30 cum				
3.1.4	Rate as per Item No. 3.1.4 of SH : Mortar	cum	0.300	₹ 3,184.67	₹ 955.40
17028	SBR Polymer Qty of cement = 0.30x0.38 = 0.114 MT or 114kg @ 2% of weight of cement 114kg x 2% = 2.28 kg	kg	2.280	₹ 215.00	₹ 490.20
	b. Labour:				
0218*	Mason (average)	Day	0.940	₹ 400.00	₹ 376.00
0212	Coolie	Day	1.020	₹ 300.00	₹ 306.00
0205	Waterman	Day	1.010	₹ 300.00	₹ 303.00
				Total	₹ 2,430.60
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 2,430.60	₹ 24.31
				Total	₹ 2,454.91
	d. Sundries & contingencies in/c cost of scaffolding : @ 4.0% on total	4.0%	on	₹ 2,454.91	₹ 98.20
				Total	₹ 2,553.11
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 2,553.11	₹ 382.97
		Total cost for 10 Sqm			₹ 2,936.08
		Total cost for 1 Sqm			₹ 293.61
			Say,	₹	293.60

17.32.3	50 mm average thickness in 3 layers.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
	Cement mortar 1:4 (1 cement : 4 fine sand) = (0.144/12)x50= 0.60 cum				
3.1.4	Rate as per Item No. 3.1.4 of SH : Mortar	cum	0.600	₹ 3,184.67	₹ 1,910.80
17028	SBR Polymer Qty of cement = 0.60x0.38 = 0.228 MT or 228kg @ 2% of weight of cement 228kg x 2% = 4.56 kg	kg	4.560	₹ 215.00	₹ 980.40
	b. Labour:				
0218*	Mason (average)	Day	1.880	₹ 400.00	₹ 752.00
0212	Coolie	Day	2.040	₹ 300.00	₹ 612.00
0205	Waterman	Day	2.020	₹ 300.00	₹ 606.00
				Total	₹ 4,861.20
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 4,861.20	₹ 48.61
				Total	₹ 4,909.81
	d. Sundries & contingencies in/c cost of scaffolding : @ 4.0% on total	4.0%	on	₹ 4,909.81	₹ 196.39
				Total	₹ 5,106.20
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 5,106.20	₹ 765.93
		Total cost for 10 Sqm			₹ 5,872.13
		Total cost for 1 Sqm			₹ 587.21
			Say,	₹	587.20

17.33	Providing, mixing and applying SBR polymer (of approved make @ minimum 2% by wt. of cement used) modified plain/reinforced cement concrete for structural members having minimum characteristic compressive strength [with ordinary portland cement, fine sand and graded stone aggregate of 10mm maximum size in proportion as per design criteria] with specified average thickness. Note: Rates shall be for finished surface area of concrete and shall include the cost of labour, concrete and appropriate approved Super-Plasticiser for rendering concrete as flowable and SBR polymer but shall exclude cost of reinforcement, bond coat, Shear Keys, centering and shuttering, strutting, propping etc (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument)				
17.33.1	50mm thick in Grade M 25 with cement content not less than 330 kg per cum				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. Area (0.5cum) M25 concrete 0.5 cum of concrete @ 330 kg/cum	sqm			
	a. Materials:				
5.31.2	Rate as per Item No. 5.31.2 of SH : Reinforced Cement Concrete (A)	cum	0.500	₹ 10,044.60	₹ 5,022.30

0125	Deduction for pumping charges : Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	0.500	₹ 175.00	₹ -87.50
17028	SBR Polymer @2% of cement 165kg = 165x2% = 3.30kg	kg	3.300	₹ 215.00	₹ 709.50
				Total	₹ 5,644.30
	b. Water charges : @ 1.0% on total except (A)	1.0%	on	₹ 622.00	₹ 6.22
				Total	₹ 5,650.52
	c. Sundries & contingencies: @ 3.0% on total except (A)	3.0%	on	₹ 628.22	₹ 18.85
				Total	₹ 5,669.37
	d. Contractor's profit & overheads: @ 15.0% on total except (A)	15.0%	on	₹ 647.07	₹ 97.06
				Total cost for 10 Sqm	₹ 5,766.43
				Total cost for 1 Sqm	₹ 576.64
				Say,	₹ 576.60

17.33.2	75mm thick in Grade M 25 with cement content not less than 330 kg per cum				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. Area (0.75cum) M25 concrete 0.75 cum of concrete @ 330 kg/cum	sqm			
	a. Materials:				
5.31.2	Rate as per Item No. 5.31.2 of SH : Reinforced Cement Concrete (A)	cum	0.75	₹ 10,044.60	₹ 7,533.45
0125	Deduction for pumping charges Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	0.75	₹ 175.00	₹ -131.25
17028	SBR Polymer @2% of cement 247.50kg = 247.50x2% = 4.95kg	kg	4.95	₹ 215.00	₹ 1,064.25
				Total	₹ 8,466.45
	b. Water charges : @ 1.0% on total except (A)	1.0%	on	₹ 933.00	₹ 9.33
				Total	₹ 8,475.78
	c. Sundries & contingencies: @ 3.0% on total except (A)	3.0%	on	₹ 942.33	₹ 28.27
				Total	₹ 8,504.05
	d. Contractor's profit & overheads: @ 15.0% on total except (A)	15.0%	on	₹ 970.60	₹ 145.59
				Total cost for 10 Sqm	₹ 8,649.64
				Total cost for 1 Sqm	₹ 864.96
				Say,	₹ 865.00

17.34	Providing, mixing and applying SBR polymer (of approved make @ minimum 2% by wt. of cement used) modified plain/reinforced cement concrete for structural members having minimum characteristic compressive strength [with ordinary portland cement, fine sand and graded stone aggregate of 10mm maximum size in proportion as per design criteria] with specified average thickness and as per direction of the Engineer-in-charge. Note: Rates shall be for finished surface area of concrete and shall include the cost of labour, concrete and appropriate approved Super- Plasticiser for rendering concrete as flowable and SBR polymer but shall exclude cost of reinforcement, bond coat, Shear Keys, centering and shuttering, strutting, propping etc (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument)				
17.34.1	50mm thick in Grade M 25 with cement content not less than 330 kg per cum				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. Area (0.5cum) M25 concrete 0.5 cum of concrete @ 330 kg/cum	sqm			
	a. Materials:				
5.31.2	Rate as per Item No. 5.31.2 of SH : Reinforced Cement Concrete (A)	cum	0.50	₹ 10,044.60	₹ 5,022.30
0125	Deduction for pumping charges : Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	0.50	₹ 175.00	₹ -87.50
17028	SBR Polymer @2% of cement 165kg = 165x2% = 3.30kg	kg	3.300	₹ 215.00	₹ 709.50
				Total	₹ 5,644.30
	b. Water charges : @ 1.0% on total except (A)	1.0%	on	₹ 622.00	₹ 6.22
				Total	₹ 5,650.52
	c. Sundries & contingencies: @ 3.0% on total except (A)	3.0%	on	₹ 628.22	₹ 18.85
				Total	₹ 5,669.37
	d. Contractor's profit & overheads: @ 15.0% on total except (A)	15.0%	on	₹ 647.07	₹ 97.06
				Total cost for 10 Sqm	₹ 5,766.43
				Total cost for 1 Sqm	₹ 576.64
				Say,	₹ 576.60

17.34.2	75mm thick in Grade M 25 with cement content not less than 330 kg per cum				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 Sqm. Area (0.75cum) M25 concrete 0.75 cum of concrete @ 330 kg/cum	sqm			
	a. Materials:				

5.31.2	Rate as per Item No. 5.31.2 of SH : Reinforced Cement Concrete (A)	cum	0.75	₹ 10,044.60	₹ 7,533.45
0125	Deduction for pumping charges : Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	0.75	₹ 175.00	₹ -131.25
17028	SBR Polymer @2% of cement 247.50kg = 247.50x2% = 4.95kg	kg	4.95	₹ 215.00	₹ 1,064.25
				Total	₹ 8,466.45
	b. Water charges : @ 1.0% on total except (A)	1.0%	on	₹ 933.00	₹ 9.33
				Total	₹ 8,475.78
	c. Sundries & contingencies: @ 3.0% on total except (A)	3.0%	on	₹ 942.33	₹ 28.27
				Total	₹ 8,504.05
	d. Contractor's profit & overheads: @ 15.0% on total except (A)	15.0%	on	₹ 970.60	₹ 145.59
		Total cost for 10 Sqm			₹ 8,649.64
		Total cost for 1 Sqm			₹ 864.96
				Say,	₹ 865.00

17.34.3	100mm thick in Grade M 25 with cement content not less than 330 kg per cum				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. Area (1.00cum) M25 concrete 1.00 cum of concrete @ 330 kg/cum	sqm			
	a. Materials:				
5.31.2	Rate as per Item No. 5.31.2 of SH : Reinforced Cement Concrete (A)	cum	1.00	₹ 10,044.60	₹ 10,044.60
0125	Deduction for pumping charges : Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	1.00	₹ 175.00	₹ -175.00
17028	SBR Polymer @2% of cement 330kg = 330x2% = 6.6kg	kg	6.60	₹ 215.00	₹ 1,419.00
				Total	₹ 11,288.60
	b. Water charges : @ 1.0% on total except (A)	1.0%	on	₹ 1,244.00	₹ 12.44
				Total	₹ 11,301.04
	c. Sundries & contingencies: @ 3.0% on total except (A)	3.0%	on	₹ 1,256.44	₹ 37.69
				Total	₹ 11,338.73
	d. Contractor's profit & overheads: @ 15.0% on total except (A)	15.0%	on	₹ 1,294.13	₹ 194.12
		Total cost for 10 Sqm			₹ 11,532.85
		Total cost for 1 Sqm			₹ 1,153.29
				Say,	₹ 1,153.30

17.35	Providing and injecting approved grout in proportion recommended by the manufacturer into cracks/honey-comb area of concrete/ masonry by suitable gun/pump at required pressure including cutting of nipples after curing etc. complete as per direction of the Engineer- in-Charge. (The payment shall be made on the basis of actual weight of approved grout injected.)				
17.35.1	Stirrer mixed Acrylic Polymer of approved make @ 2% of weight of cement used) modified Cement slurry made with non shrink compound in concrete/RCC work				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 Kg Acrylic polymer mixed cement grout	kg			
	a. Materials:				
17036	Acrylic Polymer chemical for cracks Considering 1 kg of cement grout mixed with non shrink polymer compound with cement @ 2% of cement	kg	2.00	₹ 35.00	₹ 70.00
03001	Portland Cement	tonne	0.10	₹ 6,100.00	₹ 610.00
	b. Labours:				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0235	Nozzleman	Day	1.00	₹ 425.00	₹ 425.00
0236	Pump Operator	Day	1.00	₹ 425.00	₹ 425.00
				Total	₹ 1,955.00
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 1,955.00	₹ 19.55
				Total	₹ 1,974.55
	d. Sundries & contingencies in/c carriage of materials & Injecting charges of Stirrer mixed polymer grout Gun, rubber, pipe and other accessories Hire charges of plant, machinery including necessary fuel and transportation of site: @ 165.0% on total	165.0%	on	₹ 1,974.55	₹ 3,258.01
				Total	₹ 5,232.56
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 5,232.56	₹ 784.88
		Total cost for 100 Kg			₹ 6,017.44
		Total cost for 1 Kg			₹ 60.17
				Say,	₹ 60.20

17.35.2	Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete/RCC work.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 Kg of SBR polymer mixed cement grout	kg			
	a. Materials:				
17028	SBR Polymer for crack	kg	2.00	₹ 215.00	₹ 430.00
03001	Portland Cement	tonne	0.10	₹ 6,100.00	₹ 610.00
	b. Labours:				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0235	Nozzleman	Day	1.00	₹ 425.00	₹ 425.00
0236	Pump Operator	Day	1.00	₹ 425.00	₹ 425.00
				Total	₹ 2,315.00
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 2,315.00	₹ 23.15
				Total	₹ 2,338.15
	d. Sundries & contingencies in/c carriage of materials & Injecting charges of Stirrer mixed polymer grout Gun, rubber, pipe and other accessories & Hire charges of plant, machinery including necessary fuel and transportation of site: @ 165.0% on total	165.0%	on	₹ 2,338.15	₹ 3,857.95
				Total	₹ 6,196.10
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 6,196.10	₹ 929.42
		Total cost for 100 Kg			₹ 7,125.52
		Total cost for 1 Kg			₹ 71.26
				Say,	₹ 71.30

17.35.3	Epoxy injection grout in concrete/RCC work of approved make				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Kg of Epoxy grout	kg			
	a. Materials:				
17027	Epoxy	kg	10.00	₹ 660.00	₹ 6,600.00
0144	Hire charges of plant and Machinery that can inject 350 kg/day	Day	0.03	₹ 125.00	₹ 3.75
	b. Labours:				
0203	Belder	Day	0.06	₹ 300.00	₹ 18.00
0235	Nozzleman	Day	0.03	₹ 425.00	₹ 12.75
				Total	₹ 6,634.50
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 6,634.50	₹ 66.35
				Total	₹ 6,700.85
	d. Sundries & contingencies in/c cost of gloves & goggles etc.: @ 3.0% on total	3.0%	on	₹ 6,700.85	₹ 201.03
				Total	₹ 6,901.88
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 6,901.88	₹ 1,035.28
		Total cost for 10 Kg			₹ 7,937.16
		Total cost for 1 Kg			₹ 793.72
				Say,	₹ 793.70

17.36	Providing, erecting, maintaining and removing temporary protective screens made out of specified fabric with all necessary fixing arrangement to ensure that it remains in position for the work duration as required and as per direction of the Engineer-in-charge.				
17.36.1	Wooven PVC cloth				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Materials:				
17029	Wooven PVC cloth (A)	Sqm.	10.000	₹ 30.00	₹ 300.00
	b. Labours:				
	For fixing and removal after complete work @ 25.0% on (A)	25.0%	on	₹ 300.00	₹ 75.00
				Total	₹ 375.00
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 375.00	₹ 3.75
				Total	₹ 378.75
	d. Sundries & contingencies in/c fixing double scaffolding outside : @ 3.0% on total	3.0%	on	₹ 378.75	₹ 11.36
				Total	₹ 390.11
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 390.11	₹ 58.52
		Total cost for 10 Sqm			₹ 448.63
		Total cost for 1 Sqm			₹ 44.86
				Say,	₹ 44.90

17.37	Cleaning of exposed concrete surface of sticking material including loose and foreign material by sand blasting with fine sand followed by and including cleaning with oil free air blast as required and as per direction of the Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm.	sqm			
	a. Machinery:				
0141	Hire charges of sand blasting equipment (14 sqm per day)	Day	0.700	₹ 500.00	₹ 350.00
0142	Hire charges for compressor	Day	0.700	₹ 750.00	₹ 525.00
	b. Materials:				

02003	Sand (fine) : Selected quarry	cum	1.000	₹ 370.00	₹ 370.00
	c. Labour:				
0203	Belder	Day	0.700	₹ 300.00	₹ 210.00
				Total	₹ 1,455.00
	d. Water charges : @ 1.0% on total	1.0%	on	₹ 1,455.00	₹ 14.55
				Total	₹ 1,469.55
	e. Sundries & contingencies: @ 3.0% on total	3.0%	on	₹ 1,469.55	₹ 44.09
				Total	₹ 1,513.64
	f. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 1,513.64	₹ 227.05
				Total cost for 10 Sqm	₹ 1,740.69
				Total cost for 1 Sqm	₹ 174.07
				Say,	₹ 174.10

17.38	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, fine sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as required and as per direction of the Engineer-in-charge. Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument.				
17.38.1	25mm thick in Grade M 25 with cement content not less than 330 kg per cum				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. M25 concrete 0.5 cum of concrete @ 330 kg/cum Cubical qty of concrete for 10sqm = 10x1.00x0.025 = 0.25cum Wastage 25% = 0.25x25/100 = 0.0625cum Total = 0.3125 cum	sqm			
	a. Materials:				
5.31.2	Rate as per Item No. 5.31.2 of SH : Reinforced Cement Concrete (A)	cum	0.3125	₹ 10,044.60	₹ 3,138.94
0139	Compressor, gun, rubber pipes & other accessories - Hire charge of plant & machinery i/c necessary fuel (approx. 40sqm area of shortcrete per day = 10/40 = 0.25 day)	Day	0.25	₹ 5,000.00	₹ 1,250.00
	b. Labour:				
0226	Operator (Pile/ Special machine)	Day	0.40	₹ 425.00	₹ 170.00
0235	Nozzleman/ gun man	Day	0.40	₹ 425.00	₹ 170.00
0220	Mason (brick layer) 2nd class	Day	0.40	₹ 380.00	₹ 152.00
0237	Helper (Technician)	Day	0.80	₹ 340.00	₹ 272.00
0205	Waterman	Day	0.40	₹ 300.00	₹ 120.00
				Total	₹ 5,272.94
	c. Water charges : @ 1.0% on total except (A)	1.0%	on	₹ 2,134.00	₹ 21.34
				Total	₹ 5,294.28
	d. Sundries & contingencies: @ 3.0% on total except (A)	3.0%	on	₹ 2,155.34	₹ 64.66
				Total	₹ 5,358.94
	e. Contractor's profit & overheads: @ 15.0% on total except (A)	15.0%	on	₹ 2,220.00	₹ 333.00
				Total cost for 10 Sqm	₹ 5,691.94
				Total cost for 1 Sqm	₹ 569.19
				Say,	₹ 569.20

17.38.2	50mm thick in Grade M 25 with cement content not less than 330 kg per cum				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. M25 concrete 0.5 cum of concrete @ 330 kg/cum Cubical qty of concrete for 10sqm = 10x1.00x0.050 = 0.50cum Wastage 25% = 0.50x25/100 = 0.125cum Total = 0.625 cum	sqm			
	a. Materials:				
5.31.2	Rate as per Item No. 5.31.2 of SH : Reinforced Cement Concrete (A)	cum	0.6250	₹ 10,044.60	₹ 6,277.88
0139	Compressor, gun, rubber pipes & other accessories - Hire charge of plant & machinery i/c necessary fuel (approx. 25sqm area of shortcrete per day = 10/25= 0.4day)	Day	0.40	₹ 5,000.00	₹ 2,000.00
	b. Labour:				
0226	Operator (Pile/ Special machine)	Day	0.40	₹ 425.00	₹ 170.00
0235	Nozzleman/ gun man	Day	0.40	₹ 425.00	₹ 170.00
0220	Mason (brick layer) 2nd class	Day	0.40	₹ 380.00	₹ 152.00
0237	Helper (Technician)	Day	0.80	₹ 340.00	₹ 272.00
0205	Waterman	Day	0.40	₹ 300.00	₹ 120.00
				Total	₹ 9,161.88
	c. Water charges : @ 1.0% on total except (A)	1.0%	on	₹ 2,884.00	₹ 28.84
				Total	₹ 9,190.72
	d. Sundries & contingencies: @ 3.0% on total except (A)	3.0%	on	₹ 2,912.84	₹ 87.39

				Total	₹ 9,278.11
	e. Contractor's profit & overheads: @ 15.0% on total except (A)	15.0%	on	₹ 3,000.23	₹ 450.03
		Total cost for 10 sqm			₹ 9,728.14
		Total cost for 1 sqm			₹ 972.81
			Say,		₹ 972.80

17.38.3	75mm thick in Grade M 25 with cement content not less than 330 kg per cum				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. M25 concrete 0.5 cum of concrete @ 330 kg/cum Cubical qty of concrete for 10sqm = 10x1.00x0.075 = 0.75cum Wastage 25% = 0.75x25/100 = 0.1875cum Total = 0.9375 cum	sqm			
	a. Materials:				
5.31.2	Rate as per Item No. 5.31.2 of SH : Reinforced Cement Concrete (A)	cum	0.9375	₹ 10,044.60	₹ 9,416.81
0139	Compressor, gun, rubber pipes & other accessories - Hire charge of plant & machinery i/c necessary fuel (approx. 15sqm area of shortcrete per day = 10/15= 0.665day)	Day	0.665	₹ 5,000.00	₹ 3,325.00
	b. Labour:				
0226	Operator (Pile/ Special machine)	Day	0.40	₹ 425.00	₹ 170.00
0235	Nozzleman/ gun man	Day	0.40	₹ 425.00	₹ 170.00
0220	Mason (brick layer) 2nd class	Day	0.40	₹ 380.00	₹ 152.00
0237	Helper (Technician)	Day	0.80	₹ 340.00	₹ 272.00
0205	Waterman	Day	0.40	₹ 300.00	₹ 120.00
				Total	₹ 13,625.81
	c. Water charges : @ 1.0% on total except (A)	1.0%	on	₹ 4,209.00	₹ 42.09
				Total	₹ 13,667.90
	d. Sundries & contingencies: @ 3.0% on total except (A)	3.0%	on	₹ 4,251.09	₹ 127.53
				Total	₹ 13,795.43
	e. Contractor's profit & overheads: @ 15.0% on total except (A)	15.0%	on	₹ 4,378.62	₹ 656.79
		Total cost for 10 sqm			₹ 14,452.22
		Total cost for 1 sqm			₹ 1,445.22
			Say,		₹ 1,445.20

17.39	Providing and inserting 12mm dia galvanised steel injection nipple in honey comb area and along crack line including drilling of holes of required diameter (20mm to 30mm) up to depth from 30mm to 80mm at required spacing and making the hole & crack dust free by blowing compressed air, sealing the distance between injection nipple with adhesive chemical of approved make and allow it to cure complete, as required and as per direction of the Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 20 Nos. holes	each			
	a. Materials:				
17031	Adhesive chemical (750mm deep & 20mm Dia Hole) Volume of hole = 20x(3.14/4)x2.00x2.00x7.5 = 471 cub cm. Adhesive @ 40% of 471ml = 188.40 ml, Say 188ml	ml	188.00	₹ 3.00	₹ 564.00
17032	Bit of drilling machine for Hole upto 30mm dia (One Bit done 20 Holes only)	each	1	₹ 570.00	₹ 570.00
17033	GI injection nipple 12mm dia, 75mm long	each	20.00	₹ 50.00	₹ 1,000.00
17034	Blowing compressed air for cleaning holes upto 30mm dia	each	20.00	₹ 12.00	₹ 240.00
	b. Labour:				
0218*	Mason (average)	Day	0.50	₹ 400.00	₹ 200.00
0212	Coolie	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.50	₹ 300.00	₹ 150.00
				Total	₹ 2,874.00
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 2,874.00	₹ 28.74
				Total	₹ 2,902.74
	d. Sundries & contingencies: @ 3.0% on total	3.0%	on	₹ 2,902.74	₹ 87.08
				Total	₹ 2,989.82
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 2,989.82	₹ 448.47
		Total cost for 20 Nos holes			₹ 3,438.29
		Total cost for each hole			₹ 171.91
			Say,		₹ 171.90

17.40	Providing and fixing hard drawn steel wire fabric of size 75 x25 mm mesh or other suitable size wire mesh to be fixed & firmly anchored to the concrete surface by means of "L" shaped mild steel shear key welded with existing reinforcement including the cost of materials, labour, tool & plants, as required and as per direction of the Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Sqm. (i.e. 77.50 kg)	sqm			

	a. Materials:				
17035	L shaped 100mm long, 10mm dia mild steel shear key (key to be provided at 0.5 mtr centre to centre in each direction) Total no. of Shear key of MS Bar in 10sqm = 25 nos $25 \times 0.10 \times 0.617 = 1.55 \text{ kg}$	kg	1.550	₹ 80.00	₹ 124.00
0143	Welding charges of shear key to existing reinforcement	each	25	₹ 2.50	₹ 62.50
17030	Hard drawn steel wire fabric 75x25mm, weight 7.75kg/sqm $75 \times 25 \text{mm} = 10.00 \text{ sqm}$ + Add 5% wastage = 0.50sqm Total = 10.50 sqm	sqm	10.50	₹ 480.00	₹ 5,040.00
	b. Labour:				
0207	Blacksmith 2nd class	Day	1.000	₹ 380.00	₹ 380.00
0203	Belder	Day	1.000	₹ 300.00	₹ 300.00
				Total	₹ 5,906.50
	c. Water charges : @ 1.0% on total	1.0%	on	₹ 5,906.50	₹ 59.07
				Total	₹ 5,965.57
	d. Sundries & contingencies including carriage of material at site : @ 3.0% on total	3.0%	on	₹ 5,965.57	₹ 178.97
				Total	₹ 6,144.54
	e. Contractor's profit & overheads: @ 15.0% on total	15.0%	on	₹ 6,144.54	₹ 921.68
		Total cost for 10 sqm			₹ 7,066.22
		Total cost for 1 sqm			₹ 706.62
				Say,	₹ 706.60

S U B - H E A D - 1 8



S A N I T A R Y I N S T A L L A T I O N S

BASIC RATES
SUB-HEAD : 18.0 SANITARY INSTALLATIONS

Code No.	Description	Unit	Rate
0201	Bandhani	Day	₹ 300.00
0203	Belder	Day	₹ 300.00
0205	Bhisti/Waterman	Day	₹ 300.00
0208	Carpenter (average)	Day	₹ 400.00
0210	Carpenter 2nd Class	Day	₹ 380.00
0212	Coolie/Helper	Day	₹ 300.00
0214	Fitter (2nd class)	Day	₹ 300.00
0215	Fitter (grade-1)	Day	₹ 380.00
0216	Foreman	Day	₹ 425.00
0218	Mason (average)	Day	₹ 400.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0224	Mate	Day	₹ 300.00
0227	Painter	Day	₹ 340.00
405	Carriage of Brick/ Stone aggregate below 40 mm nominal size	cum	₹ 159.75
468	Carriage of Steel material	tonne	₹ 110.94
421	Carriage of Cement	tonne	₹ 110.94
425	Carriage of Fine Sand	cum	₹ 142.63
433	Carriage of Pig lead	tonne	₹ 110.94
04006	Stone Aggregate (Single size) : 20 mm nominal size	cum	₹ 3,969.00
04007	Stone Aggregate (Single size) : 12 mm nominal size	cum	₹ 4,005.00
04008	Stone Aggregate (Single size) : 10 mm nominal size	cum	₹ 4,040.00
03001	Portland Cement	tonne	₹ 6,100.00
08053	Chromium plated Brass screws 40 mm	100 Nos	₹ 228.00
08055	Chromium plated Brass screws 25 mm	100 Nos	₹ 130.00
12008	Anticorrosive bituminous paint (black)	litre	₹ 115.00
12041	Synthetic enamel paint in black or chocolate shade	litre	₹ 185.00
12040	Synthetic enamel paint in all shades except black or chocolate shade	litre	₹ 155.00
02003	Fine sand (selected quarry)	cum	₹ 370.00
05026	Flats up to 10 mm in thickness	quintal	₹ 3,992.00
05017	Bolts and nuts up to 300 mm in length	quintal	₹ 6,749.00
18001	C.I. bracket for wash basin and sinks	pair	₹ 85.00
18002	C.P.brass chain with 40 mm dia rubber plug	each	₹ 42.00
18003	Clamps and M.S. stays including bolts and nuts for 100 mm pipe	each	₹ 40.00
18004	M.S.Holder bat clamp of approved design for 100 mm S.C.I. pipe	each	₹ 30.00
18005	M.S.Holder bat clamp of approved design for 75 mm S.C.I. pipe	each	₹ 27.00
18006	Clamps and M.S. stays including bolts and nuts for 50 mm pipe	each	₹ 35.00

Code No.	Description	Unit	Rate
18007	Clamps and M.S. stays including bolts and nuts for 75 mm pipe	each	₹ 38.00
18008	Brass stop-cock 15 mm dia	each	
18009	Mosquito proof coupling of approved design	each	₹ 35.00
18010	Vitreous china foot rests 250x130x30 mm	pair	₹ 100.00
18011	S.C.I. gully or nahani grating 100 mm dia	each	₹ 20.00
18012	Rubber insertions for 80 mm dia pipe joints	each	₹ 15.00
18013	Rubber insertions for 100 mm dia pipe joints	each	₹ 20.00
18014	Rubber insertions for 125 mm dia pipe joints	each	₹ 22.00
18015	Mirror of superior make glass 60x45 cm	each	₹ 370.00
18016	Vitreous china pedestal for wash basin	each	₹ 600.00
18017	Pig lead	kilogram	₹ 150.00
18018	Flush pipe with union spreaders and clamps all in C.P. brass for single stall	each	₹ 250.00
18019	Flush pipe with union spreaders and clamps all in C.P. brass for double stall	each	₹ 420.00
18020	Flush pipe with union spreaders and clamps all in C.P. brass for range of three stall	each	₹ 500.00
18021	Flush pipe with union spreaders and clamps all in C.P. brass for range of four stall	each	₹ 570.00
18022	Flush pipe and spreaders G.I. for single set of one squatting plate urinal	each	₹ 160.00
18023	Flush pipe and spreaders G.I. for range of two squatting plates urinal	each	₹ 250.00
18024	Flush pipe and spreaders G.I. for range of three squatting plates urinal	each	₹ 300.00
18025	Flush pipe and spreaders G.I. for range of four squatting plates urinal	each	₹ 380.00
18026	G.I. inlet connection	each	₹ 80.00
18027	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 75 mm dia	each	₹ 800.00
18028	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 100 mm dia	each	₹ 1,000.00
18029	S.C.I. plain bend 75 mm dia	each	₹ 180.00
18030	S.C.I. plain bend 100 mm dia	each	₹ 240.00
18031	S.C.I. bend with access door 75 mm dia	each	₹ 170.00
18032	S.C.I. bend with access door 100 mm dia	each	₹ 240.00
18033	S.C.I. plain single equal junctions 75x75x75 mm dia	each	₹ 260.00
18034	S.C.I. plain single equal junctions 100x100x100 mm dia	each	₹ 360.00
18035	S.C.I. single equal junctions 75x75x75 mm dia with access door.	each	₹ 275.00
18036	S.C.I. single equal junctions 100x100x100 mm dia with access door.	each	₹ 375.00
18037	S.C.I. plain double equal junctions 75x75x75x75 mm dia	each	₹ 420.00

Code No.	Description	Unit	Rate
18038	S.C.I. plain double equal junctions 100 x 100 x 100 x 100 mm dia	each	₹ 550.00
18039	S.C.I. double equal junctions 75x75x75x75 mm dia with access door.	each	₹ 430.00
18040	S.C.I. double equal junctions 100 x 100 x 100 x 100 mm dia with access door.	each	₹ 550.00
18041	Slotted cowl (terminal guard) 75 mm dia	each	₹ 110.00
18042	Slotted cowl (terminal guard) 100 mm dia	each	₹ 160.00
18043	Sand cast iron S&S plain single unequal junctions : 100x100x75 mm dia	each	₹ 380.00
18044	Sand cast iron S&S single unequal junctions: 100x100x75 mm dia with access door.	each	₹ 400.00
18045	Sand cast iron S&S plain double unequal junctions : 100x100x75x75 mm dia	each	₹ 500.00
18046	Sand cast iron S&S double unequal junctions: 100x100x75x75 mm dia with access door.	each	₹ 550.00
18047	Sand cast iron heel rest bend 75mm dia	each	₹ 230.00
18048	Sand cast iron heel rest bend 100mm dia	each	₹ 270.00
18049	S.C.I. single equal invert branch of required degree 75x75x75 mm dia	each	₹ 320.00
18050	S.C.I. single equal invert branch of required degree 100x100x100 mm dia	each	₹ 430.00
18051	S.C.I. double equal invert branch of required degree 75x75x75x75 mm dia	each	₹ 420.00
18052	S.C.I. double equal invert branch of required degree 100x100x100x100 mm dia	each	₹ 570.00
18053	S.C.I. single unequal invert branch of required degree 100x100x75 mm dia	each	₹ 510.00
18054	S.C.I. double unequal invert branch of required degree 100x100x75x75 mm dia	each	₹ 600.00
18055	S.C.I. door pieces 75 mm dia	each	₹ 280.00
18056	S.C.I. door pieces 100 mm dia	each	₹ 340.00
18057	S.C.I. collar 75 mm dia	each	₹ 120.00
18058	S.C.I. collar 100 mm dia	each	₹ 160.00
18059	Fire clay kitchen sink: 600x450x250 mm	each	₹ 1,300.00
18060	White vitreous china laboratory sink 450x300x150 mm	each	₹ 750.00
18061	White vitreous china laboratory sink 600x450x200 mm	each	₹ 1,450.00
18062	White plastic seat (solid) with lid C.P.brass hinges and rubber buffers	each	₹ 340.00
18063	Black plastic seat (solid) with lid C.P.brass hinges and rubber buffers	each	₹ 300.00
18064	Spun yarn	kilogram	₹ 45.00
18065	15 mm C.P.brass tap	each	₹ 250.00
18066	C.P.brass toilet paper holder of standard size	each	₹ 200.00
18067	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P.brass: 50 mm dia	each	₹ 160.00

Code No.	Description	Unit	Rate
18068	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P.brass: 80 mm dia	each	₹ 210.00
18069	C.P.brass trap 40 mm dia	each	₹ 135.00
18070	100 mm S.C.I. trap with vent heel	each	₹ 340.00
18071	100 mm S.C.I. trap with 100 mm inlet and 100 mm outlet	each	₹ 290.00
18072	100 mm S.C.I. trap with 100 mm inlet and 75 mm outlet	each	₹ 210.00
18073	Vitreous china lipped front urinal	each	₹ 450.00
18074	Vitreous china squatting plate urinal	each	₹ 700.00
18075	Vitreous china flat back wash basin 630x450 mm	each	₹ 650.00
18076	Vitreous china angle back wash basin 600x480 mm	each	₹ 680.00
18077	Vitreous china angle back wash basin 400x400 mm	each	₹ 350.00
18078	C.P. brass waste 32 mm	each	₹ 75.00
18079	C.P. brass waste 40 mm	each	₹ 85.00
18080	Vitreous china Indian type w.c. pan size 580 mm	each	₹ 420.00
18081	Vitreous china orrisa type w.c. pan size 580 mm	each	₹ 750.00
18082	Vitreous china pedestal type water closet	each	₹ 700.00
18083	White vitreous china dual purpose closet (Anglo Indian W.C.) suitable for use as squatting pan or European type water closet as per manufacturer's specifications	each	₹ 1,400.00
18084	Vitreous china foot rests 250x125x25 mm	pair	₹ 95.00
18085	Vitreous china Surgeon type wash basin of size 660x460 mm	each	₹ 900.00
18086	600x120 mm glass shelf with anodised aluminium angle frame, C.P.brass brackets and guard rail of standard size	each	₹ 150.00
18087	Vitreous china flat back wash basin 550x400 mm	each	₹ 550.00
18088	C.P. Brass union 40 mm dia	each	₹ 180.00
18089	C.C.I.(spun) socketed soil, waste and vent pipe 1.80 metres long:100mm dia	each	₹ 1,150.00
18090	C.C.I.(spun) socketed soil, waste and vent pipe 1.80 metres long:75mm dia	each	₹ 1,000.00
18091	S.C.I. S&S bends with access door 100mm dia	each	₹ 270.00
18092	S.C.I. S&S bends with access door 75mm dia	each	₹ 230.00
18093	S.C.I. S&S bend 100mm dia	each	₹ 250.00
18094	S.C.I. S&S bend 75mm dia	each	₹ 190.00
18095	S.C.I. S&S heel rest sanitary bend 100mm dia	each	₹ 300.00
18096	S.C.I. S&S heel rest sanitary bend 75mm dia	each	₹ 260.00
18097	S.C.I. S&S single equal junctions 100 x 100 x 100 mm	each	₹ 500.00

Code No.	Description	Unit	Rate
18098	S.C.I. S&S single equal junctions 75 x 75 x 75 mm	each	₹ 390.00
18099	S.C.I. S&S single equal junctions with access door 100x100x100 mm	each	₹ 500.00
18100	S.C.I. S&S single equal junctions with access door 75x75x75 mm	each	₹ 370.00
18101	S.C.I. S&S double equal junctions 100 x 100 x 100 mm	each	₹ 620.00
18102	S.C.I. S&S double equal junctions 75 x 75 x 75 x 75 mm	each	₹ 500.00
18103	S.C.I. S&S double equal junctions with access door 100x100x100x100 mm.	each	₹ 620.00
18104	S.C.I. S&S double equal junctions with access door 75x75x75x75 mm.	each	₹ 480.00
18105	S.C.I. S&S single unequal junctions 100x100x75 mm	each	₹ 600.00
18106	S.C.I. S&S single unequal junctions with access door 100x100x75 mm	each	₹ 650.00
18107	S.C.I. S&S double unequal junctions 100x100x75x75 mm	each	₹ 880.00
18108	S.C.I. S&S double unequal junctions with access door 100x100x75x75 mm	each	₹ 775.00
18109	S.C.I. S&S single equal invert branch of required degree 100x100x100 mm dia	each	₹ 440.00
18110	S.C.I. S&S single equal invert branch of required degree 75x75x75 mm dia	each	₹ 350.00
18111	S.C.I. S&S double equal invert branch of required degree 100x100x100x100 mm dia	each	₹ 580.00
18112	S.C.I. S&S double equal invert branch of required degree 75x75x75x75 mm dia	each	₹ 460.00
18113	S.C.I. S&S single unequal invert branch of required degree 100x100x75 mm dia	each	₹ 590.00
18114	S.C.I. S&S double unequal invert branch of required degree 100x100x75x75 mm dia	each	₹ 800.00
18115	S.C.I. S&S, 75 mm offset for 75 mm dia pipe	each	₹ 250.00
18116	S.C.I. S&S, 150 mm offset for 75 mm dia pipe	each	₹ 310.00
18117	S.C.I. S&S, 150 mm offset for 100 mm dia pipe	each	₹ 420.00
18118	S.C.I. S&S, 114 mm offset for 75 mm dia pipe	each	₹ 305.00
18119	S.C.I. S&S, 114 mm offset for 100 mm dia pipe	each	₹ 400.00
18120	S.C.I. S&S, 152 mm offset for 75 mm dia pipe	each	₹ 390.00
18121	S.C.I. S&S, 152 mm offset for 100 mm dia pipe	each	₹ 490.00
18122	S.C.I. S&S door pieces 100 mm dia	each	₹ 320.00
18123	S.C.I. S&S door pieces 75 mm dia	each	₹ 240.00
18124	S.C.I. S&S, Slotted Cowl (Terminal Guard) 100 mm	each	₹ 210.00
18125	S.C.I. S&S, Slotted Cowl (Terminal Guard) 75 mm	each	₹ 200.00
18126	S.C.I. S&S, collars 100 mm	each	₹ 200.00
18127	S.C.I. S&S, collars 75 mm	each	₹ 175.00

Code No.	Description	Unit	Rate
18128	S.C.I. S&S, 76 mm offset for 75 mm dia pipe	each	₹ 175.00
18129	S.C.I. S&S, 76 mm offset for 100 mm dia pipe	each	₹ 300.00
18130	Vitreous china toilet paper holder of standard size	each	₹ 155.00
18131	Red oxide Zinc chromate primer	litre	₹ 85.00
18132	Vitreous china flat back wash basin 450x300 mm	each	₹ 380.00
18133	Vitreous china 10 litres low level cistern without fittings	each	₹ 1,000.00
18134	Vitreous china 10 litres low level cistern with fittings	each	₹ 1,300.00
18135	Rawl plug 50 mm (designation 10 no.)	each	₹ 7.00
18136	Stainless steel kitchen sink - with drain board bowl depth 250 mm.	each	₹ 3,000.00
18137	Stainless steel kitchen sink - with drain board 510 x 1040mm bowl depth 225 mm.	each	₹ 2,700.00
18138	Stainless steel kitchen sink - with drain board 510 x 1040mm bowl depth 200 mm.	each	₹ 2,500.00
18139	Stainless steel kitchen sink - with drain board 510x1040mm bowl depth 178 mm	each	₹ 2,250.00
18140	Stainless steel kitchen sink - without drain board 610x510mm bowl depth 200 mm	each	₹ 1,900.00
18141	Stainless steel kitchen sink - without drain board 610x460mm bowl depth 200 mm.	each	₹ 1,800.00
18142	Stainless steel kitchen sink - without drain board 470x420mm bowl depth 178 mm	each	₹ 1,600.00
18143	Coloured Orissa pattern W.C. pan 580x440 mm	each	₹ 950.00
18144	Coloured Pedestal type W.C. pan 580x440 mm (European type)	each	₹ 900.00
18145	Coloured Vitreous china 10 lit. low level cistern	each	₹ 1,200.00
18146	Coloured (other than black) solid P.V.C. seat in European W.C. pan	each	₹ 390.00
18147	Circular shape 450 mm dia Mirror with Plastic moulded frame	each	₹ 400.00
18148	Rectangular shape 453x357 mm Mirror with Plastic moulded frame	each	₹ 320.00
18149	Oval shape 450x350 mm (outer dimensions) Mirror with Plastic moulded frame	each	₹ 380.00
18150	Rectangular shape 1500x450 mm Mirror with Plastic moulded frame	each	₹ 750.00
18151	Hard board 6 mm thick	sqm	₹ 200.00
18152	Semi Rigid PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	₹ 22.00
18153	Semi Rigid PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	₹ 31.00

Code No.	Description	Unit	Rate
18154	Flexible (coil shaped) PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	₹ 32.00
18155	Flexible (coil shaped) PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	₹ 35.00
18156	Coloured High density polyethylene/ poly propylene 10 lit. (full flush) capacity controlled low level flushing cistern with fittings	each	₹ 750.00
18157	White Vitreous china 10 lit. (full flush) capacity controlled low level flushing cistern with all fittings	each	₹ 1,020.00
18158	Coloured Vitreous china 10 lit. (full flush) capacity controlled low level flushing cistern with all fittings	each	₹ 1,350.00
18159	Flushing Cistern P.V.C. 10 lts capacity (low level) (White) (with fittings, accessories and flush pipe)	each	₹ 650.00
18160	P.V.C. automatic flushing cistern 5 lts capacity	each	₹ 500.00
18161	P.V.C. automatic flushing cistern 10 lts capacity	each	₹ 520.00
18162	15 mm C.P. brass tap with elbow operation lever	each	₹ 550.00
18163	White glazed fire clay draining board 600x450x25 mm	each	₹ 580.00
18164	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Single lipped urinal	each	₹ 480.00
18165	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of two lipped urinals	each	₹ 1,200.00
18166	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of three lipped urinals	each	₹ 1,500.00
18167	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of four lipped urinals	each	₹ 2,200.00
18168	White vitreous china clay half stall urinal flat back 580x380x350 mm or angle back 450x375x350 mm with waste fittings as per IS : 2556	each	₹ 1,450.00
18169	Wedge expansion hold fastener 1/4" or 6 mm	each	₹ 15.00
18170	PTMT Waste Coupling 31/32MM	Each	₹ 60.00
18171	PTMT Waste Coupling 38/40MM	Each	₹ 85.00
18172	PTMT Bottle Trap 31/32MM	Each	₹ 350.00
18173	PTMT Bottle Trap 38/40MM	Each	₹ 370.00
18174	PTMT Liquid Soap Container of 400ml capacity	Each	₹ 170.00

Code No.	Description	Unit	Rate
18175	PTMT Towel Ring 215xd200x37mm	Each	₹ 135.00
18176	PTMT Towel Rail (450MM)	Each	₹ 240.00
18177	PTMT Towel Rail (600MM)	Each	₹ 285.00
18178	PTMT Shelf 450x124x36mm	Each	₹ 300.00
18179	PTMT Urinal Spreader 15MM	Each	₹ 155.00
18180	Salem Stainless steel AISI - 304 (18/8) Orrisa pattern W.C. pan 724 mm x 578 mm	each	₹ 3,500.00
18181	Salem Stainless steel AISI - 304 (18/8) Round basin 405mm X 355 mm	each	₹ 1,800.00
18182	Salem Stainless steel AISI - 304 (18/8) Wash basin 530mm X 345mm	each	₹ 1,680.00
18183	Centrifugally cast (spun) iron S&S 100 mm inlet and 100 mm outlet	each	₹ 420.00
18184	Centrifugally cast (spun) iron S&S 100 mm inlet and 75 mm outlet	each	₹ 450.00
18185	P.T.M.T. Urinal cock 15mm dia	each	₹ 120.00
18186	Wall mounted water closet of size 780x370x690 mm	each	₹ 4,650.00
18187	Adjustable Vitreous China Cistern with fittings of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litre)	each	₹ 2,000.00
18188	White Vitreous China Waterless Urinal of size 600 x 330x315 mm	each	₹ 10,200.00
18189	Cistern with fittings for Waterless Urinal	each	₹ 2,400.00
18190	Battery based infrared sensor operated White Vitreous Urinal of approx size 610 x 390 x 370 mm	each	₹ 4,000.00
18191	Floor mounted white vitrous china double trap syphonic WC with 10 litre cistern and all fittings & fixtures, seat cover etc	each	₹ 9,000.00
18192	u-PVC double equal junction of required degree without door 75x75x75 x 75 mm	each	₹ 60.00
18193	u-PVC double equal junction of required degree without door 110x110x110 x 110 mm	each	₹ 90.00
18194	u-PVC double equal junction of required degree with door 75x75x75 x 75 mm	each	₹ 85.00
18195	u-PVC double equal junction of required degree with door 110x110x110 x 110 mm	each	₹ 120.00
18196	u-PVC double unequal junction of required degree without door 110x110x75 x 75 mm	each	₹ 150.00
18197	u-PVC double unequal junction of required degree with door 110x110x75 x 75 mm	each	₹ 180.00
18198	u-PVC single unequal junction of required degree without door 110x110x75 mm	each	₹ 125.00
18199	u-PVC single unequal junction of required degree with door 110x110x75 mm	each	₹ 150.00
181200	u- PVC Single socketed pipe - 110 mm OD working pressure 6 kg / cm ²	metre	₹ 190.00
11073	u-PVC Seal ring 75 mm dia	each	₹ 9.00
11072	u-PVC Seal ring 110 mm dia	each	₹ 14.00

SUB HEAD : 18.0					
SANITARY INSTALLATIONS					
18.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
18.1.1	White Vitreous china Orrisa pattern W.C. pan of size 580x440 mm with integral type foot rests.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				
18081	White Vitreous china Orrisa pattern W.C. pan each	each	1.00	₹ 750.00	₹ 750.00
18159	10 litre low level P.V.C. flushing cistern with	each	1.00	₹ 650.00	₹ 650.00
	fitting accessories and flush pipe				
18070	100 mm Sand C.I. 'P' or'S' trap with vent horn each	each	1.00	₹ 340.00	₹ 340.00
18009	Mosquito proof coupling of approved design	each	1.00	₹ 35.00	₹ 35.00
	LABOUR:				
0215	Fitter (grade-I)	Day	1.50	₹ 380.00	₹ 570.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 3,007.50
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	7%		₹ 210.53
	TOTAL				₹ 3,218.03
	Add for Sundries and contingencies	@	3%		₹ 90.23
	TOTAL				₹ 3,308.25
	Add for water charges	@	1%		₹ 33.08
	TOTAL				₹ 3,341.33
	Add for contractor's profit and overheads		15%		₹ 501.20
	Cost for 1 No.				₹ 3,842.53
	Say				₹ 3,842.50
18.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
18.1.2	Stainless Steel AISI-304(18/8) Orrisa pattern W.C pan of size 585x480 mm with flush pipe and integratedf type of foot rests.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				
18180	Salem Stainless steel AISI - 304 (18/8) Orrisa each	each	1.00	₹ 3,500.00	₹ 3,500.00
	pattern W.C. pan 724mm X 578mm				
18159	10 litre low level P.V.C. flushing cistern with	each	1.00	₹ 650.00	₹ 650.00
	fitting accessories and flush pipe				
18070	100 mm Sand C.I. 'P' or'S' trap with vent horn each	each	1.00	₹ 340.00	₹ 340.00
18009	Mosquito proof coupling of approved design	each	1.00	₹ 35.00	₹ 35.00
	LABOUR				
0215	Fitter (grade-I)	Day	1.50	₹ 380.00	₹ 570.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 5,757.50
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	4%		₹ 230.30

	TOTAL				₹ 5,987.80
	Add for Sundries and contingencies	@	3%		₹ 172.73
	TOTAL				₹ 6,160.53
	Add 1% for water charges	@	1%		₹ 61.61
	TOTAL				₹ 6,222.13
	Add 15% for contractor's profit and overheads	@	15%		₹ 933.32
	Cost for 1 No.				₹ 7,155.45
	Say				₹ 7,155.40
18.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
18.2.1	W.C. pan with ISI marked white solid plastic seat and lid				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				
18062	White solid plastic seat and lid with C.P. brass each	each	1.00	₹ 340.00	₹ 340.00
	hinges and rubber buffers complete				
18082	White vitreous china pedestal type W.C. pan each	each	1.00	₹ 700.00	₹ 700.00
18159	10 litre low level C.I. flushing cistern with	each	1.00	₹ 650.00	₹ 650.00
	fitting accessories and flush pipe				
18009	Mosquito proof coupling of approved design	each	1.00	₹ 35.00	₹ 35.00
	LABOUR				
0215	Fitter (grade-I)	Day	1.50	₹ 380.00	₹ 570.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 2,957.50
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	7%		₹ 207.03
	TOTAL				₹ 3,164.53
	Add for Sundries and contingencies	@	3%		₹ 88.73
	TOTAL				₹ 3,253.25
	Add 1% for water charges	@	1%		₹ 32.53
	TOTAL				₹ 3,285.78
	Add 15% for contractor's profit and overheads	@	15%		₹ 492.87
	Cost for 1 No.				₹ 3,778.65
	Say				₹ 3,778.60
18.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
18.2.2	W.C. pan with ISI marked black solid plastic seat and lid				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				
18063	Black solid plastic seat and lid with C.P.brass each	each	1.00	₹ 300.00	₹ 300.00
	hinges and rubber buffers complete				
18082	White vitreous china pedestal type W.C. pan each	each	1.00	₹ 700.00	₹ 700.00
18159	10 litre low level C.I. flushing cistern with	each	1.00	₹ 650.00	₹ 650.00
	fitting accessories and flush pipe				
18009	Mosquito proof coupling of approved design	each	1.00	₹ 35.00	₹ 35.00
	LABOUR				
0215	Fitter (grade-I)	Day	1.50	₹ 380.00	₹ 570.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50

0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 2,917.50
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	7%		₹ 204.23
	TOTAL				₹ 3,121.73
	Add for Sundries and contingencies	@	3%		₹ 93.65
	TOTAL				₹ 3,215.38
	Add 1% for water charges	@	1%		₹ 32.15
	TOTAL				₹ 3,247.53
	Add 15% for contractor's profit and overheads	@	15%		₹ 487.13
	Cost for 1 No.				₹ 3,734.66
	Say				₹ 3,734.70
18.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
18.3.1	W.C. pan with ISI marked white solid plastic seat and lid.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				
18062	White solid plastic seat and lid with C.P. brass each	each	1.00	₹ 340.00	₹ 340.00
	hinges and rubber buffers complete				
18082	White glazed pedestal type W.C. pan	each	1.00	₹ 700.00	₹ 700.00
18134	10 litre white glazed vitreous china low level flushing cistern with fitting and bracket and 40 mm white C.P. flush bend	each	1.00	₹ 1,300.00	₹ 1,300.00
18009	Mosquito proof coupling of the approved municipal design	each	1.00	₹ 35.00	₹ 35.00
	LABOUR				
0215	Fitter (grade-I)	Day	2.00	₹ 380.00	₹ 760.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
	TOTAL				₹ 3,947.50
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	5%		₹ 197.38
	TOTAL				₹ 4,144.88
	Add for Sundries and contingencies	@	3%		₹ 124.35
	TOTAL				₹ 4,269.22
	Add 1% for water charges	@	1%		₹ 42.69
	TOTAL				₹ 4,311.91
	Add 15% for contractor's profit and overheads	@	15%		₹ 646.79
	Cost for 1 No.				₹ 4,958.70
	Say				₹ 4,958.70
18.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
18.3.2	W.C. pan with ISI marked black solid plastic seat and lid.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				

18063	Black solid plastic seat and lid with C.P. brass each		1.00	₹ 300.00	₹ 300.00
	hinges and rubber buffers complete				
18082	Vitreous china pedestal type W.C. pan	each	1.00	₹ 700.00	₹ 700.00
18134	10 litre white vitreous china low level flushing each		1.00	₹ 1,300.00	₹ 1,300.00
	cistern with fitting and bracket and 40 mm				
	white C.P. flush bend				
18009	Mosquito proof coupling of the approved	each	1.00	₹ 35.00	₹ 35.00
	municipal design				
	LABOUR				
0215	Fitter (grade-I)	Day	2.00	₹ 380.00	₹ 760.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	2.00	₹ 300.00	₹ 600.00
	TOTAL				₹ 3,907.50
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	5%		₹ 195.38
	TOTAL				₹ 4,102.88
	Add for Sundries and contingencies	@	3%		₹ 123.09
	TOTAL				₹ 4,225.96
	Add 1% for water charges	@	1%		₹ 42.26
	TOTAL				₹ 4,268.22
	Add 15% for contractor's profit and overheads	@	15%		₹ 640.23
	Cost for 1 No.				₹ 4,908.45
	Say				₹ 4,908.50
18.4	Fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
18.4.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18073	Flat back or angular lipped front urinal basin	each	1.00	₹ 530.00	₹ 530.00
	of 430x260x350 mm and 340x410x265 mm				
	sizes respectively of white vitreous china				
18160	5 litre PVC automatic flushing cistern with	each	1.00	₹ 500.00	₹ 500.00
	fittings				
18164	Standard size G.I. Flush pipe with brass	each	1.00	₹ 480.00	₹ 480.00
	unions and clamps including C.P. brass				
	spreaders				
	LABOUR				
0215	Fitter (grade-I)	Day	1.75	₹ 380.00	₹ 665.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	1.75	₹ 300.00	₹ 525.00
	TOTAL				₹ 2,912.50
	Add Carriage for materials & cost of white lead,read lead,gaskin, cement ,sand,grit for fixing and repairs,paintingof brackets, fiittings etc.	@	5%		₹ 145.63
	TOTAL				₹ 3,058.13
	Add for Sundries and contingencies	@	3%		₹ 91.74
	TOTAL				₹ 3,149.87
	Add 1% for water charges	@	1%		₹ 31.50
	TOTAL				₹ 3,181.37
	Add 15% for contractor's profit and overheads	@	15%		₹ 477.21
	Cost for 1 No.				₹ 3,658.57
	Say				₹ 3,658.60

18.4	Fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
18.4.2	Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18073	Flat back or angular lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively of white glazed vitreous china	each	2.00	₹ 530.00	₹ 1,060.00
18160	5 litre PVC automatic flushing cistern with fittings	each	1.00	₹ 500.00	₹ 500.00
18165	Standard size G.I. Flush pipe with brass unions and clamps including C.P. brass spreaders	each	1.00	₹ 1,200.00	₹ 1,200.00
	LABOUR				
0215	Fitter (grade-I)	Day	2.25	₹ 380.00	₹ 855.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	2.25	₹ 300.00	₹ 675.00
	TOTAL				₹ 4,502.50
	Add Carriage for materials & cost of white lead,read lead,gaskin, cement ,sand,grit for fixing and repairs,paintingof brackets, fiitings etc.	@	3.75%		₹ 168.84
	TOTAL				₹ 4,671.34
	Add for Sundries and contingencies	@	3%		₹ 140.14
	TOTAL				₹ 4,811.48
	Add 1% for water charges	@	1%		₹ 48.11
	TOTAL				₹ 4,859.60
	Add 15% for contractor's profit and overheads	@	15%		₹ 728.94
	Cost for 1 No.				₹ 5,588.54
	Say				₹ 5,588.50
18.4	Fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
18.4.3	Range of three urinal basins with10 litre white P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18073	Flat back or angular lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively of white vitreous china	each	3.00	₹ 450.00	₹ 1,350.00
18161	10 litre PVC automatic flushing cistern with fittings	each	1.00	₹ 520.00	₹ 520.00
18166	Standard size G.I. Flush pipe with brass unions and clamps including C.P. brass spreaders	each	1.00	₹ 1,500.00	₹ 1,500.00
	LABOUR				
0215	Fitter (grade-I)	Day	3.25	₹ 380.00	₹ 1,235.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	3.25	₹ 300.00	₹ 975.00
	TOTAL				₹ 5,792.50

	Add Carriage for materials & cost of white lead,read lead,gaskin, cement ,sand,grit for fixing and repairs,paintingof brackets, fiitings etc.	@	3.25%		₹ 188.26
	TOTAL				₹ 5,980.76
	Add for Sundries and contingencies	@	3%		₹ 179.42
	TOTAL				₹ 6,160.18
	Add 1% for water charges	@	1%		₹ 61.60
	TOTAL				₹ 6,221.78
	Add 15% for contractor's profit and overheads	@	15%		₹ 933.27
	Cost for 1 No.				₹ 7,155.05
	Say				₹ 7,155.00
18.4	Fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
18.4.4	Range of four urinal basins with10 litre white P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18073	Flat back or angular lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively of white vitreous china	each	4.00	₹ 450.00	₹ 1,800.00
18161	10 litre PVC automatic flushing cistern with fittings	each	1.00	₹ 520.00	₹ 520.00
18167	Standard size G.I. Flush pipe with brass unions and clamps including C.P. brass spreaders	each	1.00	₹ 2,200.00	₹ 2,200.00
	LABOUR				
0215	Fitter (grade-I)	Day	4.00	₹ 380.00	₹ 1,520.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	4.00	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 7,452.50
	Add Carriage for materials & cost of white lead,read lead,gaskin, cement ,sand,grit for fixing and repairs,painting of brackets, fiitings etc.	@	3.00%		₹ 223.58
	TOTAL				₹ 7,676.08
	Add for Sundries and contingencies	@	3%		₹ 230.28
	TOTAL				₹ 7,906.36
	Add 1% for water charges	@	1%		₹ 79.06
	TOTAL				₹ 7,985.42
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,197.81
	Cost for 1 No.				₹ 9,183.23
	Say				₹ 9,183.20
18.5	Fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors wherever required :				
18.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				

18168	Half stall urinals of white vitreous china with waste fittings	each	1.00	₹ 1,450.00	₹ 1,450.00
18160	5 litre PVC automatic flushing cistern with all fittings	each	1.00	₹ 500.00	₹ 500.00
18018	Standard size flush pipe with unions, spreaders each and clamps all in C.P. brass	each	1.00	₹ 250.00	₹ 250.00
18067	50 mm diameter standard urinal C.I. Trap with vent arm outlet grating other couplings in C.P. brass	each	1.00	₹ 160.00	₹ 160.00
	LABOUR				
0215	Fitter (grade-I)	Day	1.75	₹ 380.00	₹ 665.00
0219	Mason 1st class	Day	2.00	₹ 425.00	₹ 850.00
0203	Beldar	Day	4.00	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 5,075.00
	Add Carriage for materials & cost of white lead,read lead,gaskin, cement ,sand,grit for fixing and repairs,painting of brackets, fittings etc.	@	2.50%		₹ 126.88
	TOTAL				₹ 5,201.88
	Add for Sundries and contingencies	@	3%		₹ 156.06
	TOTAL				₹ 5,357.93
	Add 1% for water charges	@	1%		₹ 53.58
	TOTAL				₹ 5,411.51
	Add 15% for contractor's profit and overheads	@	15%		₹ 811.73
	Cost for 1 No.				₹ 6,223.24
	Say				₹ 6,223.20
18.5	Fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors:				
18.5.2	Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18168	Two half stall urinals of white vitreous china with waste fittings	each	2.00	₹ 1,450.00	₹ 2,900.00
18160	5 litre PVC automatic flushing cistern with fittings	each	1.00	₹ 500.00	₹ 500.00
18019	Standard size flush pipe with unions, spreaders each and clamps all in C.P. brass		1.00	₹ 420.00	₹ 420.00
18067	50 mm diameter standard urinal C.I. Trap with vent arm outlet grating other couplings in C.P. brass		1.00	₹ 160.00	₹ 160.00
	LABOUR				
0215	Fitter (grade-I)	Day	2.50	₹ 380.00	₹ 950.00
0219	Mason 1st class	Day	3.00	₹ 425.00	₹ 1,275.00
0203	Beldar	Day	6.00	₹ 300.00	₹ 1,800.00
	TOTAL				₹ 8,005.00
	Add Carriage for materials & cost of white lead,read lead,gaskin, cement ,sand,grit for fixing and repairs,painting of brackets, fittings etc.	@	2.00%		₹ 200.13
	TOTAL				₹ 8,205.13
	Add for Sundries and contingencies	@	3%		₹ 246.15
	TOTAL				₹ 8,451.28
	Add 1% for water charges	@	1%		₹ 84.51
	TOTAL				₹ 8,535.79
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,280.37

	Cost for 1 No.				₹ 9,816.16
	Say				₹ 9,816.20
18.5	Fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors:				
18.5.3	Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18168	Three half stall urinals of white vitreous china with waste fittings	each	3.00	₹ 1,450.00	₹ 4,350.00
18161	10 litre PVC automatic flushing cistern with fittings	each	1.00	₹ 520.00	₹ 520.00
18020	Standard size flush pipe with unions, spreaders each and clamps all in C.P. brass		1.00	₹ 500.00	₹ 500.00
18068	80 mm diameter standard urinal C.I. Trap with vent arm outlet grating other couplings in C.P. brass	each	1.00	₹ 210.00	₹ 210.00
	LABOUR				
0215	Fitter (grade-I)	Day	3.00	₹ 380.00	₹ 1,140.00
0219	Mason 1st class	Day	3.50	₹ 425.00	₹ 1,487.50
0203	Beldar	Day	7.00	₹ 300.00	₹ 2,100.00
	TOTAL				₹ 10,307.50
	Add Carriage for materials & cost of white lead,read lead,gaskin, cement ,sand,grit for fixing and repairs,painting of brackets, fittings etc.	@	2.00%		₹ 206.15
	TOTAL				₹ 10,513.65
	Add for Sundries and contingencies	@	3%		₹ 315.41
	TOTAL				₹ 10,829.06
	Add 1% for water charges	@	1%		₹ 108.29
	TOTAL				₹ 10,937.35
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,640.60
	Cost for 1 No.				₹ 12,577.95
	Say				₹ 12,578.00
18.5	Fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors:				
18.5.4	Range of four half stall urinals with 10 litre P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18168	Four half stall urinals of white vitreous china with waste fittings	each	4.00	₹ 1,450.00	₹ 5,800.00
18161	10 litre PVC automatic flushing cistern with fittings	each	1.00	₹ 520.00	₹ 520.00
18021	Standard size flush pipe with unions, spreaders each and clamps all in C.P. brass		1.00	₹ 570.00	₹ 570.00
18068	80 mm diameter standard urinal C.I. Trap with vent arm outlet grating other couplings in C.P.	each	1.00	₹ 210.00	₹ 210.00
	LABOUR				
0215	Fitter (grade-I)	Day	3.50	₹ 380.00	₹ 1,330.00
0219	Mason 1st class	Day	4.00	₹ 425.00	₹ 1,700.00
0203	Beldar	Day	8.00	₹ 300.00	₹ 2,400.00
	TOTAL				₹ 12,530.00

	Add Carriage for materials & cost of white lead,read lead,gaskin, cement ,sand,grit for fixing and repairs,painting of brackets, fiitings etc.	@	2.00%		₹ 250.60
	TOTAL				₹ 12,780.60
	Add for Sundries and contingencies	@	3%		₹ 383.42
	TOTAL				₹ 13,164.02
	Add 1% for water charges	@	1%		₹ 131.64
	TOTAL				₹ 13,295.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,994.35
	Cost for 1 No.				₹ 15,290.01
	Say				₹ 15,290.00
18.6	Fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. Automatic flushing cistern, with fittings, standard size G.I. flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete including painting of fittings and cutting and making good the walls and floors etc. wherever required :				
18.6.1	Single squatting plate with 5 litre P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18074	Squatting plate of white glazed vitreous china each	each	1.00	₹ 700.00	₹ 700.00
18160	5 litre PVC automatic flushing cistern with fittings	each	1.00	₹ 500.00	₹ 500.00
18022	G.I. Flush pipe of standard size with spreaders fittings	each	1.00	₹ 160.00	₹ 160.00
	LABOUR				
0215	Fitter (grade-I)	Day	1.75	₹ 380.00	₹ 665.00
0219	Mason 1st class	Day	0.75	₹ 425.00	₹ 318.75
0203	Beldar	Day	3.00	₹ 300.00	₹ 900.00
	TOTAL				₹ 3,243.75
	Add Carriage for materials , white lead,read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiitings etc.	@	3.50%		₹ 113.53
	TOTAL				₹ 3,357.28
	Add for Sundries and contingencies	@	3%		₹ 100.72
	TOTAL				₹ 3,458.00
	Add 1% for water charges	@	1%		₹ 34.58
	TOTAL				₹ 3,492.58
	Add 15% for contractor's profit and overheads	@	15%		₹ 523.89
	Cost for 1 No.				₹ 4,016.47
	Say				₹ 4,016.50
18.6	Fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. Automatic flushing cistern, with fittings, standard size G.I. flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete including painting of fittings and cutting and making good the walls and floors etc. wherever required :				
18.6.2	Range of two squatting plates with 5 litre P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18074	Squatting plate of white glazed vitreous china each		2.00	₹ 700.00	₹ 1,400.00
18160	5 litre PVC automatic flushing cistern with fittings	each	1.00	₹ 500.00	₹ 500.00
18023	G.I. Flush pipe of standard size with spreaders each fittings		1.00	₹ 250.00	₹ 250.00
	LABOUR				
0215	Fitter (grade-I)	Day	2.50	₹ 380.00	₹ 950.00
0219	Mason 1st class	Day	1.50	₹ 425.00	₹ 637.50

0203	Beldar	Day	4.00	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 4,937.50
	Add Carriage for materials , white lead,read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiitings etc.	@	3.25%		₹ 160.47
	TOTAL				₹ 5,097.97
	Add for Sundries and contingencies	@	3%		₹ 152.94
	TOTAL				₹ 5,250.91
	Add 1% for water charges	@	1%		₹ 52.51
	TOTAL				₹ 5,303.42
	Add 15% for contractor's profit and overheads	@	15%		₹ 795.51
	Cost for 1 No.				₹ 6,098.93
	Say				₹ 6,098.90
18.6	Fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. Automatic flushing cistern, with fittings, standard size G.I. flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete including painting of fittings and cutting and making good the walls and floors etc. wherever required :				
18.6.3	Range of three squatting plates with 10 litre P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18074	Squatting plate of white glazed vitreous china each		3.00	₹ 700.00	₹ 2,100.00
18161	10 litre PVC automatic flushing cistern with fitting	each	1.00	₹ 520.00	₹ 520.00
18024	G.I. Flush pipe of standard size with spreaders fittings	each	1.00	₹ 300.00	₹ 300.00
	LABOUR				
0215	Fitter (grade-I)	Day	3.00	₹ 380.00	₹ 1,140.00
0219	Mason 1st class	Day	1.50	₹ 425.00	₹ 637.50
0203	Beldar	Day	5.00	₹ 300.00	₹ 1,500.00
	TOTAL				₹ 6,197.50
	Add Carriage for materials , white lead,read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiitings etc.	@	3.00%		₹ 185.93
	TOTAL				₹ 6,383.43
	Add for Sundries and contingencies	@	3%		₹ 191.50
	TOTAL				₹ 6,574.93
	Add 1% for water charges	@	1%		₹ 65.75
	TOTAL				₹ 6,640.68
	Add 15% for contractor's profit and overheads	@	15%		₹ 996.10
	Cost for 1 No.				₹ 7,636.78
	Say				₹ 7,636.80
18.6	Fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. Automatic flushing cistern, with fittings, standard size G.I. flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete including painting of fittings and cutting and making good the walls and floors etc. wherever required :				
18.6.4	Range of four squatting plates with 10 litre P.V.C. automatic flushing cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18074	Squatting plate of white glazed vitreous china	each	4.00	₹ 700.00	₹ 2,800.00
18161	10 litre PVC automatic flushing cistern with fitting	each	1.00	₹ 520.00	₹ 520.00
18025	G.I. Flush pipe of standard size with spreaders fittings		1.00	₹ 380.00	₹ 380.00
	LABOUR				
0215	Fitter (grade-I)	Day	3.50	₹ 380.00	₹ 1,330.00
0219	Mason 1st class	Day	1.75	₹ 425.00	₹ 743.75
0203	Beldar	Day	5.50	₹ 300.00	₹ 1,650.00

	TOTAL				₹ 7,423.75
	Add Carriage for materials , white lead,read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiittings etc.	@	2.75%		₹ 204.15
	TOTAL				₹ 7,627.90
	Add for Sundries and contingencies	@	3%		₹ 228.84
	TOTAL				₹ 7,856.74
	Add 1% for water charges	@	1%		₹ 78.57
	TOTAL				₹ 7,935.31
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,190.30
	Cost for 1 No.				₹ 9,125.60
	Say				₹ 9,125.60
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
18.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18075	630x450 mm flat back wash basin of white vitreous china	each	1.00	₹ 650.00	₹ 650.00
18065	15 mm C.P. brass pillar taps	each	2.00	₹ 250.00	₹ 500.00
18078	32 mm diameter C.P. brass waste of standard pattern	each	1.00	₹ 75.00	₹ 75.00
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	2.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.33	₹ 380.00	₹ 125.40
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.67	₹ 300.00	₹ 201.00
	TOTAL				₹ 1,776.65
	Add Carriage for materials and cost of white lead,read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiittings and PVC connection etc.	@	5.00%		₹ 88.83
	TOTAL				₹ 1,865.48
	Add for Sundries and contingencies	@	3%		₹ 55.96
	TOTAL				₹ 1,921.45
	Add 1% for water charges	@	1%		₹ 19.21
	TOTAL				₹ 1,940.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 291.10
	Cost for 1 No.				₹ 2,231.76
	Say				₹ 2,231.80
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
18.7.2	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar taps.				
pillar tap.					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18075	630x450 mm flat back wash basin of white vitreous china	each	1.00	₹ 650.00	₹ 650.00
18065	15 mm C.P. brass pillar taps	each	1.00	₹ 250.00	₹ 250.00
18078	32 mm diameter C.P. brass waste of standard pattern	each	1.00	₹ 75.00	₹ 75.00
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.63	₹ 300.00	₹ 189.00
	TOTAL				₹ 1,503.25

	Add Carriage for materials , white lead,read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fittings and PVC connection etc.	@	5.50%		₹ 82.68
	TOTAL				₹ 1,585.93
	Add for Sundries and contingencies	@	3%		₹ 47.58
	TOTAL				₹ 1,633.51
	Add 1% for water charges	@	1%		₹ 16.34
	TOTAL				₹ 1,649.84
	Add 15% for contractor's profit and overheads	@	15%		₹ 247.48
	Cost for 1 No.				₹ 1,897.32
	Say				₹ 1,897.30
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
18.7.3	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18087	550x400 mm flat back wash basin of white	each	1.00	₹ 550.00	₹ 550.00
	vitreous china				
18065	15 mm C.P. brass pillar taps	each	2.00	₹ 250.00	₹ 500.00
18078	32 mm diameter C.P. brass waste of standard each	each	1.00	₹ 75.00	₹ 75.00
	pattern				
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	2.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.33	₹ 380.00	₹ 125.40
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.67	₹ 300.00	₹ 201.00
	TOTAL				₹ 1,676.65
	Add Carriage for materials , white lead,read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fittings and PVC connection etc.	@	6.00%		₹ 100.60
	TOTAL				₹ 1,777.25
	Add for Sundries and contingencies	@	3%		₹ 53.32
	TOTAL				₹ 1,830.57
	Add 1% for water charges	@	1%		₹ 18.31
	TOTAL				₹ 1,848.87
	Add 15% for contractor's profit and overheads	@	15%		₹ 277.33
	Cost for 1 No.				₹ 2,126.20
	Say				₹ 2,126.20
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
18.7.4	White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P. brass pillar tap.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18087	550x400 mm flat back wash basin of white	each	1.00	₹ 550.00	₹ 550.00
	vitreous china				
18065	15 mm C.P. brass pillar taps	each	1.00	₹ 250.00	₹ 250.00
18078	32 mm diameter C.P. brass waste of standard each		1.00	₹ 75.00	₹ 75.00
	pattern				
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25

0203	Beldar	Day	0.63	₹ 300.00	₹ 189.00
	TOTAL				₹ 1,403.25
	Add Carriage for all materials and cost of white lead, read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiittings and PVC connection etc.	@	6.50%		₹ 91.21
	TOTAL				₹ 1,494.46
	Add for Sundries and contingencies	@	3%		₹ 44.83
	TOTAL				₹ 1,539.30
	Add 1% for water charges	@	1%		₹ 15.39
	TOTAL				₹ 1,554.69
	Add 15% for contractor's profit and overheads	@	15%		₹ 233.20
	Cost for 1 No.				₹ 1,787.89
	Say				₹ 1,787.90
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
18.7.5	White Vitreous China Angle back wash basin size 600x480 mm with single 15 mm C.P. brass pillar tap.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
18076	600x480 mm angle back wash basin of white	each	1.00	₹ 750.00	₹ 750.00
	vitreous china				
18065	15 mm C.P. brass piller taps	each	1.00	₹ 250.00	₹ 250.00
18078	32 mm diameter C.P. brass waste of standard	each	1.00	₹ 75.00	₹ 75.00
	pattern				
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.63	₹ 300.00	₹ 189.00
	TOTAL				₹ 1,603.25
	Add Carriage for all materials and cost of white lead, read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiittings and PVC connection etc.	@	5.50%		₹ 88.18
	TOTAL				₹ 1,691.43
	Add for Sundries and contingencies	@	3%		₹ 50.74
	TOTAL				₹ 1,742.17
	Add 1% for water charges	@	1%		₹ 17.42
	TOTAL				₹ 1,759.59
	Add 15% for contractor's profit and overheads	@	15%		₹ 263.94
	Cost for 1 No.				₹ 2,023.53
	Say				₹ 2,023.50
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
18.7.6	White Vitreous China Angle back wash basin size 400x400 mm with single 15 mm C.P. brass pillar tap.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18077	400x400 mm angle back wash basin of white each	each	1.00	₹ 550.00	₹ 550.00
	vitreous china				
18065	15 mm C.P. brass piller taps	each	1.00	₹ 250.00	₹ 250.00
18078	32 mm diameter C.P. brass waste of standard each		1.00	₹ 48.00	₹ 48.00
	pattern				
18001	C.I./M.S. brackets	pair	1.00	₹ 48.00	₹ 48.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				

0215	Fitter (grade-I)	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.63	₹ 300.00	₹ 189.00
	TOTAL				₹ 1,339.25
	Add Carriage for all materials and cost of white lead, read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fittings and PVC connection etc.	@	5.50%		₹ 73.66
	TOTAL				₹ 1,412.91
	Add for Sundries and contingencies	@	3%		₹ 42.39
	TOTAL				₹ 1,455.30
	Add 1% for water charges	@	1%		₹ 14.55
	TOTAL				₹ 1,469.85
	Add 15% for contractor's profit and overheads	@	15%		₹ 220.48
	Cost for 1 No.				₹ 1,690.33
	Say				₹ 1,690.30
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
17.7.7	White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18132	450x300 mm angle back wash basin of white each	each	1.00	₹ 500.00	₹ 500.00
	vitreous china				
18065	15 mm C.P. brass piller taps	each	1.00	₹ 250.00	₹ 250.00
18078	32 mm diameter C.P. brass waste of standard each		1.00	₹ 75.00	₹ 75.00
	pattern				
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.63	₹ 300.00	₹ 189.00
	TOTAL				₹ 1,353.25
	Add Carriage for all materials and cost of white lead, read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fittings and PVC connection etc.	@	5.50%		₹ 74.43
	TOTAL				₹ 1,427.68
	Add for Sundries and contingencies	@	3%		₹ 42.83
	TOTAL				₹ 1,470.51
	Add 1% for water charges	@	1%		₹ 14.71
	TOTAL				₹ 1,485.21
	Add 15% for contractor's profit and overheads	@	15%		₹ 222.78
	Cost for 1 No.				₹ 1,708.00
	Say				₹ 1,708.00
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
17.7.8	White Vitreous China Surgeon type wash basin of size 660x460 mm with a pair of L5 mm C.P. brass pillar taps with elbow operated levers.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18085	660x460 mm Surgeon type wash basin of	each	1.00	₹ 900.00	₹ 900.00
	white vitreous china				
18162	15 mm C.P. brass pillar taps (elbow operated each		2.00	₹ 550.00	₹ 1,100.00
	lever)				
18078	32 mm diameter C.P. brass waste of standard each		1.00	₹ 75.00	₹ 75.00
	pattern				

18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	2.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.33	₹ 380.00	₹ 125.40
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.67	₹ 300.00	₹ 201.00
	TOTAL				₹ 2,626.65
	Add Carriage for all materials and cost of white lead, read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiittings and PVC connection etc.	@	5.00%		₹ 131.33
	TOTAL				₹ 2,757.98
	Add for Sundries and contingencies	@	3%		₹ 82.74
	TOTAL				₹ 2,840.72
	Add 1% for water charges	@	1%		₹ 28.41
	TOTAL				₹ 2,869.13
	Add 15% for contractor's profit and overheads	@	15%		₹ 430.37
	Cost for 1 No.				₹ 3,299.50
	Say				₹ 3,299.50
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
17.7.9	White Vitreous China Surgeon type wash basin of size 660x460 mm with single 15 mm C.P. brass pillar taps with elbow operated levers ISI marked.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18085	660x460 mm Surgeon type wash basin of	each	1.00	₹ 900.00	₹ 900.00
	white vitreous china				
18162	15 mm C.P. brass piller taps (elbow operated each		1.00	₹ 550.00	₹ 550.00
	lever)				
18078	32 mm diameter C.P. brass waste of standard each		1.00	₹ 75.00	₹ 75.00
	pattern				
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.63	₹ 300.00	₹ 189.00
	TOTAL				₹ 2,053.25
	Add Carriage for all materials and cost of white lead, read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiittings and PVC connection etc.	@	5.00%		₹ 102.66
	TOTAL				₹ 2,155.91
	Add for Sundries and contingencies	@	3%		₹ 64.68
	TOTAL				₹ 2,220.59
	Add 1% for water charges	@	1%		₹ 22.21
	TOTAL				₹ 2,242.80
	Add 15% for contractor's profit and overheads	@	15%		₹ 336.42
	Cost for 1 No.				₹ 2,579.22
	Say				₹ 2,579.20
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
17.7.10	Stainless Steel AISI-304(18/8) Round basin 405x355 mm with single 15 mm C.P. brass pillar tap				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18181	Salem Stainless steel AISI - 304 (18/8) Round each	each	1.00	₹ 1,800.00	₹ 1,800.00

	basin 405mm X 355mm				
18065	15 mm C.P. brass pillar taps	each	1.00	₹ 250.00	₹ 250.00
18078	32 mm diameter C.P. brass waste of standard	each	1.00	₹ 75.00	₹ 75.00
	pattern				
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.63	₹ 300.00	₹ 189.00
	TOTAL				₹ 2,653.25
	Add Carriage for all materials and cost of white lead, read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiittings and PVC connection etc.	@	5.00%		₹ 132.66
	TOTAL				₹ 2,785.91
	Add for Sundries and contingencies	@	3%		₹ 83.58
	TOTAL				₹ 2,869.49
	Add 1% for water charges	@	1%		₹ 28.69
	TOTAL				₹ 2,898.18
	Add 15% for contractor's profit and overheads	@	15%		₹ 434.73
	Cost for 1 No.				₹ 3,332.91
	Say				₹ 3,332.90
18.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
17.7.11	Stainless Steel AISI-304(18/8) Wash basin 530x345 mm with single 15 mm C.P. brass pillar tap.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18182	Salem Stainless steel AISI - 304 (18/8) Wash	each	1.00	₹ 1,680.00	₹ 1,680.00
	basin 530mm X 345mm				
18065	15 mm C.P. brass pillar taps	each	1.00	₹ 250.00	₹ 250.00
18078	32 mm diameter C.P. brass waste of standard	each	1.00	₹ 75.00	₹ 75.00
	pattern				
18001	C.I./M.S. brackets	pair	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.63	₹ 300.00	₹ 189.00
	TOTAL				₹ 2,533.25
	Add Carriage for all materials and cost of white lead, read lead,gaskin, cement ,sand, grit for fixing and repairs,painting of brackets, fiittings and PVC connection etc.	@	5.00%		₹ 126.66
	TOTAL				₹ 2,659.91
	Add for Sundries and contingencies	@	3%		₹ 79.80
	TOTAL				₹ 2,739.71
	Add 1% for water charges	@	1%		₹ 27.40
	TOTAL				₹ 2,767.11
	Add 15% for contractor's profit and overheads	@	15%		₹ 415.07
	Cost for 1 No.				₹ 3,182.17
	Say				₹ 3,182.20
18.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pedestal				
	MATERIALS				
18016	White vitreous china pededstal	each	1.00	₹ 600.00	₹ 600.00
	LABOUR				
0219	Mason 1st class	Day	0.20	₹ 425.00	₹ 85.00

0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 745.00
	Add Carriage for all materials and cost of white cement ,mortar for fixing and repairs etc.	@	3.50%		₹ 26.08
	TOTAL				₹ 771.08
	Add for Sundries and contingencies	@	3%		₹ 23.13
	TOTAL				₹ 794.21
	Add 1% for water charges	@	1%		₹ 7.94
	TOTAL				₹ 802.15
	Add 15% for contractor's profit and overheads	@	15%		₹ 120.32
	Cost for 1 No.				₹ 922.47
	Say				₹ 922.50
18.9	Providing and fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls wherever required :				
18.9.1	White glazed fire clay kitchen sink of size 600x450x250 mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18059	White glazed fire clay kitchen sink of size 600x450x250 mm	each	1.00	₹ 1,300.00	₹ 1,300.00
18001	C.I. Bracket	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
18079	40 mm C.P. brass waste	each	1.00	₹ 85.00	₹ 85.00
18008	Brass stop-cock 15 mm dia	each	1.00	₹ -	₹ -
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.56	₹ 300.00	₹ 168.00
	TOTAL				₹ 1,903.85
	Add for paintings of brackets, Carriage of all materials including cost of Red lead, White lead, Gaskin,plugs, screws and the materials required to make good walls like cement, sand grit etc	@	4.00%		₹ 76.15
	TOTAL				₹ 1,980.00
	Add for Sundries and contingencies	@	3%		₹ 59.40
	TOTAL				₹ 2,039.40
	Add 1% for water charges	@	1%		₹ 20.39
	TOTAL				₹ 2,059.80
	Add 15% for contractor's profit and overheads	@	15%		₹ 308.97
	Cost for 1 No.				₹ 2,368.77
	Say				₹ 2,368.80
18.10	Providing and fixing Stainless Steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required:				
18.10.1	Kitchen sink with drain board				
18.10.1.1	510x1040 mm bowl depth 250mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18136	Stainless steel kitchen sink - with drain board each bowl depth 250 mm.	each	1.00	₹ 3,000.00	₹ 3,000.00
18001	C.I. Brackets	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.60	₹ 425.00	₹ 255.00
0203	Beldar	Day	0.82	₹ 300.00	₹ 246.00
	TOTAL				₹ 3,711.60

	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	3.50%		₹ 129.91
	TOTAL				₹ 3,841.51
	Add for Sundries and contingencies	@	3%		₹ 115.25
	TOTAL				₹ 3,956.75
	Add 1% for water charges	@	1%		₹ 39.57
	TOTAL				₹ 3,996.32
	Add 15% for contractor's profit and overheads	@	15%		₹ 599.45
	Cost for 1 No.				₹ 4,595.77
	Say				₹ 4,595.80
18.10	Providing and fixing Stainless Steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required:				
18.10.1	Kitchen sink with drain board				
18.10.1.2	510x1040 mm bowl depth 225mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18137	Stainlees steel kitchen sink - with drain board each		1.00	₹ 2,700.00	₹ 2,700.00
	510 x 1040mm bowl depth 225 mm.				
18001	C.I. Brackets	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.60	₹ 425.00	₹ 255.00
0203	Beldar	Day	0.82	₹ 300.00	₹ 246.00
	TOTAL				₹ 3,411.60
	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	5.00%		₹ 170.58
	TOTAL				₹ 3,582.18
	Add for Sundries and contingencies	@	3%		₹ 107.47
	TOTAL				₹ 3,689.65
	Add 1% for water charges	@	1%		₹ 36.90
	TOTAL				₹ 3,726.54
	Add 15% for contractor's profit and overheads	@	15%		₹ 558.98
	Cost for 1 No.				₹ 4,285.52
	Say				₹ 4,285.50
18.10	Providing and fixing Stainless Steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required:				
18.10.1	Kitchen sink with drain board				
18.10.1.3	510x1040 mm bowl depth 200mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18138	Stainlees steel kitchen sink - with drain board each	each	1.00	₹ 2,500.00	₹ 2,500.00
	510 x 1040mm bowl depth 200 mm.				
18001	C.I. Brackets	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.60	₹ 425.00	₹ 255.00
0203	Beldar	Day	0.82	₹ 300.00	₹ 246.00
	TOTAL				₹ 3,211.60
	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	5.25%		₹ 168.61
	TOTAL				₹ 3,380.21
	Add for Sundries and contingencies	@	3%		₹ 101.41
	TOTAL				₹ 3,481.62

	Add 1% for water charges	@	1%		₹ 34.82
	TOTAL				₹ 3,516.43
	Add 15% for contractor's profit and overheads	@	15%		₹ 527.46
	Cost for 1 No.				₹ 4,043.90
	Say				₹ 4,043.90
18.10	Providing and fixing Stainless Steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required:				
18.10.1	Kitchen sink with drain board				
18.10.1.4	460x915 mm bowl depth 178mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18,139	Stainless steel kitchen sink - with drain board each	each	1.00	₹ 2,250.00	₹ 2,250.00
	510x1040mm bowl depth 178 mm				
18,001	C.I. Brackets	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.60	₹ 425.00	₹ 255.00
0203	Beldar	Day	0.82	₹ 300.00	₹ 246.00
	TOTAL				₹ 2,961.60
	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	3.00%		₹ 88.85
	TOTAL				₹ 3,050.45
	Add for Sundries and contingencies	@	3%		₹ 91.51
	TOTAL				₹ 3,141.96
	Add 1% for water charges	@	1%		₹ 31.42
	TOTAL				₹ 3,173.38
	Add 15% for contractor's profit and overheads	@	15%		₹ 476.01
	Cost for 1 No.				₹ 3,649.39
	Say				₹ 3,649.40
18.10	Providing and fixing Stainless Steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required:				
18.10.2	Kitchen sink without drain board				
18.10.2.1	610x510 mm bowl depth 200 mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18140	Stainless steel kitchen sink - without drain board 610x510mm bowl depth 200 mm	each	1.00	₹ 1,900.00	₹ 1,900.00
18001	C.I. Brackets	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.56	₹ 300.00	₹ 168.00
	TOTAL				₹ 2,418.85
	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	3.50%		₹ 84.66
	TOTAL				₹ 2,503.51
	Add for Sundries and contingencies	@	3%		₹ 75.11
	TOTAL				₹ 2,578.62
	63+9	@	1%		₹ 25.79
	TOTAL				₹ 2,604.40
	Add 15% for contractor's profit and overheads	@	15%		₹ 390.66
	Cost for 1 No.				₹ 2,995.06
	Say				₹ 2,995.10

18.10	Providing and fixing Stainless Steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required:				
18.10.2	Kitchen sink without drain board				
18.10.2.2	610x460 mm bowl depth 200 mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18141	Stainless steel kitchen sink - without drain	each	1.00	₹ 1,800.00	₹ 1,800.00
	board 610x460mm bowl depth 178 mm				
18001	C.I. Brackets	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.56	₹ 300.00	₹ 168.00
	TOTAL				₹ 2,318.85
	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	3.00%		₹ 69.57
	TOTAL				₹ 2,388.42
	Add for Sundries and contingencies	@	3%		₹ 71.65
	TOTAL				₹ 2,460.07
	Add 1% for water charges	@	1%		₹ 24.60
	TOTAL				₹ 2,484.67
	Add 15% for contractor's profit and overheads	@	15%		₹ 372.70
	Cost for 1 No.				₹ 2,857.37
	Say				₹ 2,857.40
18.10	Providing and fixing Stainless Steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required:				
18.10.2	Kitchen sink without drain board				
18.10.2.3	470x420 mm bowl depth 178 mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18142	Stainless steel kitchen sink - without drain	each	1.00	₹ 1,600.00	₹ 1,600.00
	board 470x420mm bowl depth 178 mm				
18001	C.I. Brackets	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.56	₹ 300.00	₹ 168.00
	TOTAL				₹ 2,118.85
	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	3.00%		₹ 63.57
	TOTAL				₹ 2,182.42
	Add for Sundries and contingencies	@	3%		₹ 65.47
	TOTAL				₹ 2,247.89
	Add 1% for water charges	@	1%		₹ 22.48
	TOTAL				₹ 2,270.37
	Add 15% for contractor's profit and overheads	@	15%		₹ 340.56
	Cost for 1 No.				₹ 2,610.92
	Say				₹ 2,610.90
18.11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug 40mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete including painting of fittings and brackets, cutting and making good the wall wherever required :				
18.11.1	Size 450x300x150mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				

	MATERIALS				
18060	White vitreous china laboratory sink of size	each	1.00	₹ 750.00	₹ 750.00
	450x300x150 mm				
18001	C.I. bracket for wash basin and sinks	pair	1.00	₹ 85.00	₹ 85.00
18002	C.P. brass chain with 40 mm rubber plug	each	1.00	₹ 42.00	₹ 42.00
18079	C.P. brass waste 40 mm	each	1.00	₹ 85.00	₹ 85.00
18069	40 mm C.P. brass trap	each	1.00	₹ 135.00	₹ 135.00
18088	40 mm C.P. brass union	each	1.00	₹ 180.00	₹ 180.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.56	₹ 300.00	₹ 168.00
	TOTAL				₹ 1,668.85
	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	8.00%		₹ 133.51
	TOTAL				₹ 1,802.36
	Add for Sundries and contingencies	@	3%		₹ 54.07
	TOTAL				₹ 1,856.43
	Add 1% for water charges	@	1%		₹ 18.56
	TOTAL				₹ 1,874.99
	Add 15% for contractor's profit and overheads	@	15%		₹ 281.25
	Cost for 1 No.				₹ 2,156.24
	Say				₹ 2,156.20
18.11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug 40mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete including painting of fittings and brackets, cutting and making good the wall wherever required :				
18.11.2	Size 600x450x200mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18061	White vitreous china laboratory sink of size	each	1.00	₹ 1,450.00	₹ 1,450.00
	600x450x200 mm				
18001	C.I. bracket for wash basin and sinks	pair	1.00	₹ 85.00	₹ 85.00
18002		each	1.00	₹ 42.00	₹ 42.00
18079	C.P. brass waste 40 mm	each	1.00	₹ 85.00	₹ 85.00
18069	40mm C.P. brass trap	each	1.00	₹ 135.00	₹ 135.00
18088	C.P. brass union, 40mm dia	each	1.00	₹ 180.00	₹ 180.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.22	₹ 380.00	₹ 83.60
0219	Mason 1st class	Day	0.33	₹ 425.00	₹ 140.25
0203	Beldar	Day	0.56	₹ 300.00	₹ 168.00
	TOTAL				₹ 2,368.85
	Add for Carriage of all materials and cost of cement, sand, grit, Red lead, White lead, Gaskin, screws and painting of fittings and brackets etc.	@	8.00%		₹ 189.51
	TOTAL				₹ 2,558.36
	Add for Sundries and contingencies	@	3%		₹ 76.75
	TOTAL				₹ 2,635.11
	Add 1% for water charges	@	1%		₹ 26.35
	TOTAL				₹ 2,661.46
	Add 15% for contractor's profit and overheads	@	15%		₹ 399.22
	Cost for 1 No.				₹ 3,060.68
	Say				₹ 3,060.70
18.12	Providing and fixing draining board with C.I. brackets including painting of brackets, cutting and making good the walls wherever required :				
18.12.1	White glazed fire clay draining board of size 600x450x25mm				
Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for one no.				
	MATERIALS				
18163	White glazed fire clay draining board of size 600x450x25 mm	each	1.00	₹ 580.00	₹ 580.00
18001	C.I./M.S. Brackets	pair	1.00	₹ 85.00	₹ 85.00
	LABOUR				
0215	Fitter (grade-I)	Day	0.06	₹ 380.00	₹ 22.80
0219	Mason 1st class	Day	0.17	₹ 425.00	₹ 72.25
0203	Beldar	Day	0.22	₹ 300.00	₹ 66.00
	TOTAL				₹ 826.05
	Add for painting of fittings and brackets , carriage of all materials, including cost of materials to make good walls like cement, sand, grit etc.	@	3.00%		₹ 24.78
	TOTAL				₹ 850.83
	Add for Sundries and contingencies	@	3%		₹ 25.52
	TOTAL				₹ 876.36
	Add 1% for water charges	@	1%		₹ 8.76
	TOTAL				₹ 885.12
	Add 15% for contractor's profit and overheads	@	15%		₹ 132.77
	Cost for 1 No.				₹ 1,017.89
	Say				₹ 1,017.90
18.13	Providing and fixing white vitreous china water closet squatting pan (Indian type)				
18.13.1	Long pattern W.C. pan of size 580 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18080	White glazed vitreous china long pan pattern each	each	1.00	₹ 420.00	₹ 420.00
	squatting pan size 580 mm				
	LABOUR				
0215	Fitter (grade-I)	Day	0.20	₹ 380.00	₹ 76.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 858.50
	Add for Carriage of all material and cost of material like Read lead,white lead and Gaskin,cement,sand and grit for repairs and painting of fitting etc.	@	5.00%		₹ 42.93
	TOTAL				₹ 901.43
	Add for Sundries and contingencies	@	3%		₹ 27.04
	TOTAL				₹ 928.47
	Add 1% for water charges	@	1%		₹ 9.28
	TOTAL				₹ 937.75
	Add 15% for contractor's profit and overheads	@	15%		₹ 140.66
	Cost for 1 No.				₹ 1,078.42
	Say				₹ 1,078.40
18.13	Providing and fixing white vitreous china water closet squatting pan (Indian type)				
18.13.2	Orissa pattern W.C. pan of size 580x440 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18081	White glazed vitreous china Orissa pattern	each	1.00	₹ 750.00	₹ 750.00
	squatting pan size 580 mm				
	LABOUR				
0215	Fitter (grade-I)	Day	0.20	₹ 380.00	₹ 76.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 1,188.50

	Add for Carriage of all material and cost of material like Read lead,white lead and Gaskin,cement,sand and grit for repairs and painting of fitting etc.	@	5.00%		₹ 59.43
	TOTAL				₹ 1,247.93
	Add for Sundries and contingencies	@	3%		₹ 37.44
	TOTAL				₹ 1,285.36
	Add 1% for water charges	@	1%		₹ 12.85
	TOTAL				₹ 1,298.22
	Add 15% for contractor's profit and overheads	@	15%		₹ 194.73
	Cost for 1 No.				₹ 1,492.95
	Say				₹ 1,492.90
18.14	Extra for using coloured W.C. pan instead of white W.C. pan				
18.14.1	Orissa pattern W.C. pan 580x440 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18143	Coloured Orissa patern W.C. pan	each	1.00	₹ 950.00	₹ 950.00
18081	White Orissa patern W.C. pan 580x440 mm	each	1.00	₹ 750.00	₹ -750.00
	Difference of cost				₹ 200.00
	TOTAL				₹ 200.00
	Add for Sundries and contingencies	@	3%		₹ 6.00
	TOTAL				₹ 206.00
	Add 1% for water charges	@	1%		₹ 2.06
	TOTAL				₹ 208.06
	Add 15% for contractor's profit and overheads	@	15%		₹ 31.21
	Cost for 1 No.				₹ 239.27
	Say				₹ 239.30
18.15	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18082	White vitreous china pedestal type W.C. pan each	each	1.00	₹ 700.00	₹ 700.00
	LABOUR				
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 1,062.50
	Add for Carriage of all material and cost of material like Read lead,white lead and Gaskin,cement,sand and grit for repairs etc.	@	3.50%		₹ 37.19
	TOTAL				₹ 1,099.69
	Add for Sundries and contingencies	@	3%		₹ 32.99
	TOTAL				₹ 1,132.68
	Add 1% for water charges	@	1%		₹ 11.33
	TOTAL				₹ 1,144.00
	Add 15% for contractor's profit and overheads	@	15%		₹ 171.60
	Cost for 1 No.				₹ 1,315.61
	Say				₹ 1,315.60
18.16	Extra for using coloured pedestal type W.C pan (European type) with low level cistern of same colour instead of white vitreous china W.C pan and cistern.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18144	Coloured (European type) W.C. pan	each	1.00	₹ 900.00	₹ 900.00
18082	White (European type) W.C. pan	each	1.00	₹ 700.00	₹ -700.00
18145	Coloured low level cistern	each	1.00	₹ 1,200.00	₹ 1,200.00
18133	White vitreous china low level flushing cistern each	each	1.00	₹ 1,000.00	₹ -1,000.00
	10 litre capacity				

	Difference of cost				₹	400.00
	TOTAL				₹	400.00
	Add for Sundries and contingencies	@	3%		₹	12.00
	TOTAL				₹	412.00
	Add 1% for water charges	@	1%		₹	4.12
	TOTAL				₹	416.12
	Add 15% for contractor's profit and overheads	@	15%		₹	62.42
	Cost for 1 No.				₹	478.54
	Say				₹	478.50
18.17	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet:					
18.17.1	250x130x30 mm					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one pair					
	MATERIALS					
18010	White vitreous china foot rest of standard pattern for squatting pan W.C.	pair	1.00	₹ 100.00	₹	100.00
	LABOUR					
0219	Mason 1st class	Day	0.06	₹ 425.00	₹	25.50
0203	Beldar	Day	0.06	₹ 300.00	₹	18.00
	TOTAL				₹	143.50
	Add for Carriage of all material and cost of material like cement,sand and grit for repairs/fixing etc.	@	7.00%		₹	10.05
	TOTAL				₹	153.55
	Add for Sundries and contingencies	@	3%		₹	4.61
	TOTAL				₹	158.15
	Add 1% for water charges	@	1%		₹	1.58
	TOTAL				₹	159.73
	Add 15% for contractor's profit and overheads	@	15%		₹	23.96
	Cost for 1 No.				₹	183.69
	Say				₹	183.70
18.17	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet:					
18.17.2	250x125x25 mm					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one pair					
	MATERIALS					
18084	White glazed vitreous china foot rest of standard pattern for squatting pan W.C.	pair	1.00	₹ 95.00	₹	95.00
	LABOUR					
0219	Mason 1st class	Day	0.06	₹ 425.00	₹	25.50
0203	Beldar	Day	0.06	₹ 300.00	₹	18.00
	TOTAL				₹	138.50
	Add for Carriage of all material and cost of material like cement,sand and grit for repairs/fixing etc.	@	7.00%		₹	9.70
	TOTAL				₹	148.20
	Add for Sundries and contingencies	@	3%		₹	4.45
	TOTAL				₹	152.64
	Add 1% for water charges	@	1%		₹	1.53
	TOTAL				₹	154.17
	Add 15% for contractor's profit and overheads	@	15%		₹	23.13
	Cost for 1 No.				₹	177.29
	Say				₹	177.30
18.18	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.					
18.18.1	10 litre capacity-White					

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18159	Flushing Cistern P.V.C. 10 lts capacity (low level) (White) (with fittings, accessories and flush pipe)	each	1.00	₹ 650.00	₹ 650.00
	LABOUR				
	(Considering 1 fitter and 1 beldar can fix 8 cistern in one day)				
0215	Fitter grade-I	Day	0.125	₹ 380.00	₹ 47.50
0203	Beldar	Day	0.125	₹ 300.00	₹ 37.50
	TOTAL				₹ 735.00
	Add Carriage for all materials and cost of Read lead,white lead and Gaskin,cement,sand and grit for repairs etc.	@	5.00%		₹ 36.75
	TOTAL				₹ 771.75
	Add for Sundries and contingencies	@	3%		₹ 23.15
	TOTAL				₹ 794.90
	Add 1% for water charges	@	1%		₹ 7.95
	TOTAL				₹ 802.85
	Add 15% for contractor's profit and overheads	@	15%		₹ 120.43
	Cost for 1 No.				₹ 923.28
	Say				₹ 923.30
18.18	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.				
18.18.2	10 litre capacity-coloured				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18156	Coloured High density polyethylene/ poly propylene 10 lit. (full flush) capacity controlled low level flushing cistern with fittings	each	1.00	₹ 750.00	₹ 750.00
	LABOUR				
	(Considering 1 fitter and 1 beldar can fix 8 cistern in one day)				
0215	Fitter grade-I	Day	0.125	₹ 380.00	₹ 47.50
0203	Beldar	Day	0.125	₹ 300.00	₹ 37.50
	TOTAL				₹ 835.00
	Add Carriage for all materials and cost of Read lead,white lead and Gaskin,cement,sand and grit for repairs etc.	@	5.00%		₹ 41.75
	TOTAL				₹ 876.75
	Add for Sundries and contingencies	@	3%		₹ 26.30
	TOTAL				₹ 903.05
	Add 1% for water charges	@	1%		₹ 9.03
	TOTAL				₹ 912.08
	Add 15% for contractor's profit and overheads	@	15%		₹ 136.81
	Cost for 1 No.				₹ 1,048.90
	Say				₹ 1,048.90
18.19	Providing and fixing controlled flush, low level cistern made of vitreous china with all fittings complete.				
18.19.1	10 litre (full flush) capacity-white				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
7126	Controlled flush cistern with accessories	each	1.00	₹ 1,020.00	₹ 1,020.00

	LABOUR				
0215	Fitter grade-I	Day	0.50	₹ 380.00	₹ 190.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 1,360.00
	Add Carriage for all materials and cost of Read lead,white lead and Gaskin,cement,sand and grit for repairs etc.	@	3.00%		₹ 40.80
	TOTAL				₹ 1,400.80
	Add for Sundries and contingencies	@	3%		₹ 42.02
	TOTAL				₹ 1,442.82
	Add 1% for water charges	@	1%		₹ 14.43
	TOTAL				₹ 1,457.25
	Add 15% for contractor's profit and overheads	@	15%		₹ 218.59
	Cost for 1 No.				₹ 1,675.84
	Say				₹ 1,675.80
18.19	Providing and fixing controlled flush, low level cistern made of vitreous china with all fittings complete.				
18.19.2	10 litre (full flush) capacity-coloured				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18158	Controlled flush cistern with accessories	each	1.00	₹ 1,350.00	₹ 1,350.00
	LABOUR				
0215	Fitter grade-I	Day	0.50	₹ 380.00	₹ 190.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 1,690.00
	Add Carriage for all materials and cost of Read lead,white lead and Gaskin,cement,sand and grit for repairs etc.	@	3.00%		₹ 50.70
	TOTAL				₹ 1,740.70
	Add for Sundries and contingencies	@	3%		₹ 52.22
	TOTAL				₹ 1,792.92
	Add 1% for water charges	@	1%		₹ 17.93
	TOTAL				₹ 1,810.85
	Add 15% for contractor's profit and overheads	@	15%		₹ 271.63
	Cost for 1 No.				₹ 2,082.48
	Say				₹ 2,082.50
18.20	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :				
18.20.1	White solid plastic seat with lid				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18062	White plastic seat (solid)with lid C.P.brass hinges and rubber buffers	each	1.00	₹ 340.00	₹ 340.00
	TOTAL				₹ 340.00
	Add Carriage for all materials & fixing charges etc.	@	5.00%		₹ 17.00
	TOTAL				₹ 357.00
	Add for Sundries and contingencies	@	3%		₹ 10.71
	TOTAL				₹ 367.71
	Add 1% for water charges	@	1%		₹ 3.68
	TOTAL				₹ 371.39
	Add 15% for contractor's profit and overheads	@	15%		₹ 55.71
	Cost for 1 No.				₹ 427.10
	Say				₹ 427.10
18.20	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :				

18.20.2	Black solid plastic seat with lid				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18063	Black solid plastic seat and lid with C.P. brass each		1.00	₹ 300.00	₹ 300.00
	hinges and rubber buffers complete				
	TOTAL				₹ 300.00
	Add Carriage for all materials & fixing charges etc.	@	5.00%		₹ 15.00
	TOTAL				₹ 315.00
	Add for Sundries and contingencies	@	3%		₹ 9.45
	TOTAL				₹ 324.45
	Add 1% for water charges	@	1%		₹ 3.24
	TOTAL				₹ 327.69
	Add 15% for contractor's profit and overheads	@	15%		₹ 49.15
	Cost for 1 No.				₹ 376.85
	Say				₹ 376.80
18.21	Extra for providing coloured other than black solid P.V.C. plastic seat and cover in European type W.C. pan, instead of white plastic seat and cover.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18146	Coloured P.V.C. plastic seat and lid	each	1.00	₹ 390.00	₹ 390.00
18062	White P.V.C. plastic seat and lid	each	1.00	₹ 340.00	₹ -340.00
	Difference of cost				₹ 50.00
	Add for Sundries and contingencies	@	3%		₹ 1.50
	TOTAL				₹ 51.50
	Add 1% for water charges	@	1%		₹ 0.52
	TOTAL				₹ 52.02
	Add 15% for contractor's profit and overheads	@	15%		₹ 7.80
	Cost for 1 No.				₹ 59.82
	Say				₹ 59.80
18.22	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C. pan.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18026	G.I. Inlet connection	each	1.00	₹ 80.00	₹ 80.00
	TOTAL				₹ 80.00
	Add Carriage for all materials & fixing charges etc.	@	12.00%		₹ 9.60
	TOTAL				₹ 89.60
	Add for Sundries and contingencies	@	3%		₹ 2.69
	TOTAL				₹ 92.29
	Add 1% for water charges	@	1%		₹ 0.92
	TOTAL				₹ 93.21
	Add 15% for contractor's profit and overheads	@	15%		₹ 13.98
	Cost for 1 No.				₹ 107.19
	Say				₹ 107.20
18.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18073	Flat back or wall corner type lipped front	each	1.00	₹ 450.00	₹ 450.00
	urinal basin 430x260x350 mm and				

	340x410x260 mm respectively of white				
	vitreous china				
	LABOUR				
0215	Fitter grade-I	Day	0.38	₹ 380.00	₹ 144.40
0203	Beldar	Day	0.38	₹ 300.00	₹ 114.00
	TOTAL				₹ 708.40
	Add Carriage for all materials etc.	@	2.50%		₹ 17.71
	TOTAL				₹ 726.11
	Add for Sundries and contingencies	@	3%		₹ 21.78
	TOTAL				₹ 747.89
	Add 1% for water charges	@	1%		₹ 7.48
	TOTAL				₹ 755.37
	Add 15% for contractor's profit and overheads	@	15%		₹ 113.31
	Cost for 1 No.				₹ 868.68
	Say				₹ 868.70
18.24	Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18074	Squatting plate urinal of white vitreous china each	each	1.00	₹ 700.00	₹ 700.00
	with integral longitudinal flush pipe				
	LABOUR				
0215	Fitter grade-I	Day	0.50	₹ 380.00	₹ 190.00
0219	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 1,402.50
	Add Carriage for all materials and cost of cement, sand and grit for fixing/repairs etc.	@	3.00%		₹ 42.08
	TOTAL				₹ 1,444.58
	Add for Sundries and contingencies	@	3%		₹ 43.34
	TOTAL				₹ 1,487.91
	Add 1% for water charges	@	1%		₹ 14.88
	TOTAL				₹ 1,502.79
	Add 15% for contractor's profit and overheads	@	15%		₹ 225.42
	Cost for 1 No.				₹ 1,728.21
	Say				₹ 1,728.20
18.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings:				
18.25.1	Flat back wash basin of size 630x450mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18075	White vitreous china flat back wash basin	each	1.00	₹ 650.00	₹ 650.00
	630x450 mm				
	LABOUR				
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 896.50
	Add Carriage for all materials etc.	@	3.00%		₹ 26.90
	TOTAL				₹ 923.40
	Add for Sundries and contingencies	@	3%		₹ 27.70
	TOTAL				₹ 951.10
	Add 15% for contractor's profit and overheads	@	15%		₹ 142.66
	Cost for 1 No.				₹ 1,093.76
	Say				₹ 1,093.80

18.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :				
18.25.2	Flat back wash basin of size 550x400mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18087	White vitreous china flat back wash basin	each	1.00	₹ 550.00	₹ 550.00
	550x400 mm				
	LABOUR				
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 796.50
	Add Carriage for all materials etc.	@	3.00%		₹ 23.90
	TOTAL				₹ 820.40
	Add for Sundries and contingencies	@	3%		₹ 24.61
	TOTAL				₹ 845.01
	Add 15% for contractor's profit and overheads	@	15%		₹ 126.75
	Cost for 1 No.				₹ 971.76
	Say				₹ 971.80
18.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings: -				
18.25.3	Angle back wash basin of size 600x480mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18076	White vitreous china angle flat back wash	each	1.00	₹ 680.00	₹ 680.00
	basin 600x480 mm				
	LABOUR				
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 926.50
	Add Carriage for all materials etc.	@	3.00%		₹ 27.80
	TOTAL				₹ 954.30
	Add for Sundries and contingencies	@	3%		₹ 28.63
	TOTAL				₹ 982.92
	Add 15% for contractor's profit and overheads	@	15%		₹ 147.44
	Cost for 1 No.				₹ 1,130.36
	Say				₹ 1,130.40
18.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings:				
18.25.4	Angle back wash basin of size 400x400mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18077	White vitreous china angle flat back wash	each	1.00	₹ 350.00	₹ 350.00
	basin 400x400 mm				
	LABOUR				
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 596.50
	Add Carriage for all materials etc.	@	3.00%		₹ 17.90
	TOTAL				₹ 614.40
	Add for Sundries and contingencies	@	3%		₹ 18.43
	TOTAL				₹ 632.83
	Add 15% for contractor's profit and overheads	@	15%		₹ 94.92

	Cost for 1 No.				₹ 727.75
	Say				₹ 727.80
17.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings:				
17.25.5	Flat back wash basin of size 450x300mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no,				
	MATERIALS				
18132	White vitreous china flat back wash basin	each	1.00	₹ 380.00	₹ 380.00
	450x300 mm				
	LABOUR				
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 626.50
	Add Carriage for all materials etc.	@	3.00%		₹ 18.80
	TOTAL				₹ 645.30
	Add for Sundries and contingencies	@	3%		₹ 19.36
	TOTAL				₹ 664.65
	Add 15% for contractor's profit and overheads	@	15%		₹ 99.70
	Cost for 1 No.				₹ 764.35
	Say				₹ 764.40
18.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings:				
18.25.6	Surgeon type wash basin of size 660x460mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18085	White vitreous china surgeon type back wash each	each	1.00	₹ 900.00	₹ 900.00
	basin 660x460 mm				
	LABOUR				
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 1,146.50
	Add Carriage for all materials etc.	@	3.00%		₹ 34.40
	TOTAL				₹ 1,180.90
	Add for Sundries and contingencies	@	3%		₹ 35.43
	TOTAL				₹ 1,216.32
	Add 15% for contractor's profit and overheads	@	15%		₹ 182.45
	Cost for 1 No.				₹ 1,398.77
	Say				₹ 1,398.80
18.26	Providing and fixing kitchen sink including making all connections excluding cost of fittings.				
18.26.1	White glazed fire clay sink of size 600x450x250mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18059	White glazed fire clay sink of size	each	1.00	₹ 1,300.00	₹ 1,300.00
	600x450x250 mm				
	LABOUR				
0215	Fitter grade-I	Day	0.25	₹ 380.00	₹ 95.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00
	TOTAL				₹ 1,512.50

	Add Carriage for all materials etc.	@	2.50%		₹ 37.81
	TOTAL				₹ 1,550.31
	Add for Sundries and contingencies	@	3%		₹ 46.51
	TOTAL				₹ 1,596.82
	Add 15% for contractor's profit and overheads	@	15%		₹ 239.52
	Cost for 1 No.				₹ 1,836.35
	Say				₹ 1,836.30
17.27	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings:				
17.27.1	Size 450x300x150 mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18060	Laboratory sink of size 450x300x150 mm	each	1.00	₹ 750.00	₹ 750.00
	LABOUR				
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 996.50
	Add Carriage for all materials etc.	@	3.00%		₹ 29.90
	TOTAL				₹ 1,026.40
	Add for Sundries and contingencies	@	3%		₹ 30.79
	TOTAL				₹ 1,057.19
	Add 15% for contractor's profit and overheads	@	15%		₹ 158.58
	Cost for 1 No.				₹ 1,215.76
	Say				₹ 1,215.80
18.27	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings:				
18.27.2	Size 600x450x200 mm.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18061	Laboratory sink of size 600x450x200 mm	each	1.00	₹ 1,450.00	₹ 1,450.00
	LABOUR				
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0219	Mason 1st class	Day	0.10	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 1,696.50
	Add Carriage for all materials etc.	@	3.00%		₹ 50.90
	TOTAL				₹ 1,747.40
	Add for Sundries and contingencies	@	3%		₹ 52.42
	TOTAL				₹ 1,799.82
	Add 15% for contractor's profit and overheads	@	15%		₹ 269.97
	Cost for 1 No.				₹ 2,069.79
	Say				₹ 2,069.80
18.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
18.28.1	Semi rigid pipe				
17.28.1.1	32 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18152	Semi rigid P.V.C. waste pipe with waste fittings	each	1.00	₹ 22.00	₹ 22.00
	LABOUR				
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0203	Beldar	Day	0.05	₹ 300.00	₹ 15.00

	TOTAL				₹	56.00
	Add Carriage of materials	@	1.00%		₹	0.56
	TOTAL				₹	56.56
	Add for Sundries and contingencies	@	3%		₹	1.70
	TOTAL				₹	58.26
	Add 15% for contractor's profit and overheads	@	15%		₹	8.74
	Cost for 1 No.				₹	67.00
	Say				₹	67.00
17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					
17.28.1	Semi rigid pipe					
17.28.1.2	40 mm dia					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18153	Semi rigid P.V.C. waste pipe with waste fittings	each	1.00	₹ 31.00	₹	31.00
	LABOUR					
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹	19.00
0203	Beldar	Day	0.05	₹ 300.00	₹	15.00
	TOTAL				₹	65.00
	Add Carriage of materials	@	1.00%		₹	0.65
	TOTAL				₹	65.65
	Add for Sundries and contingencies	@	3%		₹	1.97
	TOTAL				₹	67.62
	Add 15% for contractor's profit and overheads	@	15%		₹	10.14
	Cost for 1 No.				₹	77.76
	Say				₹	77.80
17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					
17.28.2	Flexible pipe					
17.28.2.1	32 mm dia					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18154	Flexible pipe (coil type) with waste fittings	each	1.00	₹ 32.00	₹	32.00
	LABOUR					
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹	19.00
0203	Beldar	Day	0.05	₹ 300.00	₹	15.00
	TOTAL				₹	66.00
	Add Carriage of materials	@	1.00%		₹	0.66
	TOTAL				₹	66.66
	Add for Sundries and contingencies	@	3%		₹	2.00
	TOTAL				₹	68.66
	Add 15% for contractor's profit and overheads	@	15%		₹	10.30
	Cost for 1 No.				₹	78.96
	Say				₹	79.00
17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					
17.28.2	Flexible pipe					
17.28.2.2	40 mm dia					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no					
	MATERIALS					
18155	Flexible pipe (coil type) with waste fittings	each	1.00	₹ 35.00	₹	35.00
	LABOUR					
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹	19.00

0203	Beldar	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 69.00
	Add Carriage of materials	@	1.00%		₹ 0.69
	TOTAL				₹ 69.69
	Add for Sundries and contingencies	@	3%		₹ 2.09
	TOTAL				₹ 71.78
	Add 15% for contractor's profit and overheads	@	15%		₹ 10.77
	Cost for 1 No.				₹ 82.55
	Say				₹ 82.50
18.29	Providing and fixing 100 mm sand cast Iron grating for gully trap.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18011	100 mm S.C.I. Grating for gully or Nahani trap	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0215	Fitter grade-I	Day	0.03	₹ 380.00	₹ 11.40
0203	Beldar	Day	0.03	₹ 300.00	₹ 9.00
	TOTAL				₹ 40.40
	Add Carriage of materials	@	1.00%		₹ 0.40
	TOTAL				₹ 40.80
	Add for Sundries and contingencies	@	3%		₹ 1.22
	TOTAL				₹ 42.03
	Add 15% for contractor's profit and overheads	@	15%		₹ 6.30
	Cost for 1 No.				₹ 48.33
	Say				₹ 48.30
18.30	Providing and fixing in position 25mm diameter mosquito proof coupling of approved municipal design.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	MATERIALS				
18009	Mosquito proof coupling of the approved municipal design	each	1.00	₹ 35.00	₹ 35.00
	LABOUR				
0215	Fitter grade-I	Day	0.02	₹ 380.00	₹ 7.60
0203	Beldar	Day	0.02	₹ 300.00	₹ 6.00
	TOTAL				₹ 48.60
	Add Carriage of materials	@	1.00%		₹ 0.49
	TOTAL				₹ 49.09
	Add for Sundries and contingencies	@	3%		₹ 1.47
	TOTAL				₹ 50.56
	Add 15% for contractor's profit and overheads	@	15%		₹ 7.58
	Cost for 1 No.				₹ 58.14
	Say				₹ 58.10
18.31	Providing and fixing 600x450 mm bevelled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost of one no.				
	MATERIALS				
18015	Mirror of superior make glass	each	1.00	₹ 370.00	₹ 370.00
18151	600x450 mm 6 mm thick hard board	sqm	0.27	₹ 200.00	₹ 54.00
	(A) Wooden cleats				
	A Rate same as item no. 8.30 of SH: Wood work	each	4.00	₹ 12.94	₹ 51.76
08055	25 mm C.P.brass screw, and washers	100 Nos	4.00	₹ 130.00	₹ 5.20
	LABOUR				
0208	Carpenter (average)	Day	0.33	₹ 400.00	₹ 46.73

0203	Beldar	Day	0.33	₹ 300.00	₹ 44.63
	TOTAL				₹ 572.32
	Add Carriage of materials etc.(except A)	@	5.00%		₹ 26.03
	TOTAL				₹ 598.35
	Add for Sundries and contingencies (except A)	@	3%		₹ 16.40
	TOTAL				₹ 614.75
	Add 15% for contractor's profit and overheads (except A)	@	15%		₹ 84.45
	Cost for 1 No.				₹ 699.19
	Say				₹ 699.20
18.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
17.32.1	Circular shape 450 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18147	Mirror 450 mm dia with plastic moulded frame	each	1.00	₹ 400.00	₹ 400.00
	Hard board 0.45x0.45 = 0.2025 sqm				
	Add wastage @ 10% = 0.0203 sqm				
18151	= 0.2228 sqm say 0.22sqm	sqm	0.22	₹ 200.00	₹ 44.00
18135	Raw plug 40 to 50 mm	each	4.00	₹ 7.00	₹ 28.00
08055	C.P. bras screws and washers	100 Nos	4.00	₹ 130.00	₹ 5.20
	LABOUR				
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.4	₹ 300.00	₹ 120.00
	TOTAL				₹ 757.20
	Add Carriage of materials	@	2.00%		₹ 15.14
	TOTAL				₹ 772.34
	Add for Sundries and contingencies	@	3%		₹ 23.17
	TOTAL				₹ 795.51
	Add 15% for contractor's profit and overheads	@	15%		₹ 119.33
	Cost for 1 No.				₹ 914.84
	Say				₹ 914.80
18.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
18.32.2	Rectangular shape 453x357mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18148	Mirror 453x357 mm dia with plastic moulded frame	each	1.00	₹ 320.00	₹ 320.00
	Hard board 0.453x0.357 = 0.1617 sqm				
	Add wastage @ 10% = 0.0162 sqm				
18151	= 0.1779 sqm say 0.18 sqm	sqm	0.18	₹ 200.00	₹ 36.00
18135	Raw plug 40 to 50 mm	each	4.00	₹ 7.00	₹ 28.00
08055	C.P. bras screws 25 mm and washers	100 Nos	4.00	₹ 130.00	₹ 5.20
	LABOUR				
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 669.20
	Add Carriage of materials	@	2.00%		₹ 13.38
	TOTAL				₹ 682.58
	Add for Sundries and contingencies	@	3%		₹ 20.48
	TOTAL				₹ 703.06
	Add 15% for contractor's profit and overheads	@	15%		₹ 105.46
	Cost for 1 No.				₹ 808.52
	Say				₹ 808.50
18.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				

18.32.3	Oval shape 450x350mm (outer dimensions)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18149	Oval shape mirror 450x350 mm (outer dimensions)	each	1.00	₹ 380.00	₹ 380.00
	Hard board 0.45x0.35=0.1575 sqm				
	Add wastage @ 10% = 0.0158 sqm				
18151	= 0.1733 sqm say 0.17 sqm	sqm	0.16	₹ 200.00	₹ 32.00
18135	Raw plug 40 to 50 mm	each	4.00	₹ 7.00	₹ 28.00
08055	C.P. bras screws 25 mm and washers	100 Nos	4.00	₹ 130.00	₹ 5.20
	LABOUR				
0208	Carpenter (average)	Day	0.40	₹ 400.00	₹ 160.00
0203	Beldar	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 725.20
	Add Carriage of materials	@	2.00%		₹ 14.50
	TOTAL				₹ 739.70
	Add for Sundries and contingencies	@	3%		₹ 22.19
	TOTAL				₹ 761.90
	Add 15% for contractor's profit and overheads	@	15%		₹ 114.28
	Cost for 1 No.				₹ 876.18
	Say				₹ 876.20
18.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
18.32.4	Rectangular shape 1500x450 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18150	Mirror 1500x450 mm dia with plastic moulded frame	each	1.00	₹ 750.00	₹ 750.00
	Hard board 1.50x0.45 = 0.675 sqm				
	Add wastage @ 10% = 0.0675 sqm				
18151	= 0.7425 sqm say 0.74sqm	sqm	0.74	₹ 200.00	₹ 148.00
18135	Raw plug 40 to 50 mm	each	6.00	₹ 7.00	₹ 42.00
08055	C.P. bras screws and washers	100 Nos	6.00	₹ 130.00	₹ 7.80
	LABOUR				
0208	Carpenter (average)	Day	0.33	₹ 400.00	₹ 132.00
0203	Beldar	Day	0.33	₹ 300.00	₹ 99.00
	TOTAL				₹ 1,178.80
	Add Carriage of materials	@	2.00%		₹ 23.58
	TOTAL				₹ 1,202.38
	Add for Sundries and contingencies	@	3%		₹ 36.07
	TOTAL				₹ 1,238.45
	Add 15% for contractor's profit and overheads	@	15%		₹ 185.77
	Cost for 1 No.				₹ 1,424.21
	Say				₹ 1,424.20
18.33	Providing and fixing 600x120x5mm glass shelf with edges round of supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18086	600x120x5 mm glass shelf with anodised aluminium angle frame C.P. brass brackets & guard rail of standard size	each	1.00	₹ 150.00	₹ 150.00
18135	Raw plugs	each	2.00	₹ 7.00	₹ 14.00
08053	40 mm C.P. brass screws	100 Nos	4.00	₹ 228.00	₹ 9.12
	LABOUR				
0208	Carpenter (average)	Day	0.25	₹ 400.00	₹ 100.00
0203	Beldar	Day	0.25	₹ 300.00	₹ 75.00

	TOTAL				₹	348.12
	Add Carriage of materials	@	4.00%		₹	13.92
	TOTAL				₹	362.04
	Add for Sundries and contingencies	@	3%		₹	10.86
	TOTAL				₹	372.91
	Add 15% for contractor's profit and overheads	@	15%		₹	55.94
	Cost for 1 No.				₹	428.84
	Say				₹	428.80
18.34	Providing and fixing toilet paper holder :					
18.34.1	C.P. brass					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost of one no.					
	MATERIALS					
18066	C.P. brass toilet holder of standard size	each	1.00	₹ 200.00	₹	200.00
08053	25 mm C.P.brass screw	100 Nos	2.00	₹ 130.00	₹	2.60
	LABOUR					
0208	Carpenter (average)	Day	0.1	₹ 400.00	₹	40.00
0203	Beldar	Day	0.1	₹ 300.00	₹	30.00
	TOTAL				₹	272.60
	Add Carriage of materials and cost of cleats and materials for fixing cleats etc.	@	12.50%		₹	34.08
	TOTAL				₹	306.68
	Add for Sundries and contingencies	@	3%		₹	9.20
	TOTAL				₹	315.88
	Add 15% for contractor's profit and overheads	@	15%		₹	47.38
	Cost for 1 No.				₹	363.26
	Say				₹	363.30
18.34	Providing and fixing toilet paper holder:					
18.34.2	Vitreous china					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost of one no.					
	MATERIALS					
18130	Vitreous china toilet holder of standard size	each	1.00	₹ 155.00	₹	155.00
08053	25 mm C.P.brass screw	100 Nos	6.00	₹ 130.00	₹	7.80
	LABOUR					
0208	Carpenter (average)	Day	0.10	₹ 400.00	₹	40.00
0203	Beldar	Day	0.10	₹ 300.00	₹	30.00
	TOTAL				₹	232.80
	Add Carriage of materials and cost of cleats and materials for fixing cleats etc.	@	10.00%		₹	23.28
	TOTAL				₹	256.08
	Add for Sundries and contingencies	@	3%		₹	7.68
	TOTAL				₹	263.76
	Add 15% for contractor's profit and overheads	@	15%		₹	39.56
	Cost for 1 No.				₹	303.33
	Say				₹	303.30
18.35	Providing and fixing soil, waste and vent pipes:					
18.35.1	100 mm dia.					
18.35.1.1	Sand cast iron S&S pipe as per IS: 1729.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 17.37 m					
	(1.8mx10)-(9x0.07m) = 17.37 m= 10 Nos 1.80 mtr long pipe.					
	MATERIALS					
18028	100 mm sand cast iron pipe single socket	each	10.50	₹ 1,000.00	₹	10,500.00
	(1.80 m long)					
	including 5% allowance for wastage (10 + 5%)=10.5					
	LABOUR					
0215	Fitter grade-I	Day	0.42	₹ 380.00	₹	159.60

0201	Bandhani	Day	0.21	₹ 300.00	₹ 63.00
0203	Beldar	Day	0.83	₹ 300.00	₹ 249.00
	TOTAL				₹ 10,971.60
	Add for Carriage of all materials and ladder, scaffolding etc.	@	5.00%		₹ 548.58
	TOTAL				₹ 11,520.18
	Add for Sundries and contingencies	@	3%		₹ 345.61
	TOTAL				₹ 11,865.79
	Add 1% for water charges	@	1%		₹ 118.66
	TOTAL				₹ 11,984.44
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,797.67
	Cost for 17.37 mtr..				₹ 13,782.11
	Cost for 1.0 mtr.				₹ 793.44
	Say				₹ 793.40
18.35	Providing and fixing soil, waste and vent pipes :				
18.35.1	100 mm dia.				
18.35.1.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 17.37 m				
	(1.8mx10)-(9x0.07m) = 17.37 m= 10 Nos 1.80 mtr long pipe.				
	MATERIALS				
18089	100 mm centrifugally cast (spun) iron S&S	each	10.50	₹ 1,150.00	₹ 12,075.00
	pipes (1.80 m long)				
	including 5% allowance for wastage (10 + 5%)=10.5				
	LABOUR				
0215	Fitter grade-I	Day	0.42	₹ 380.00	₹ 159.60
0201	Bandhani	Day	0.21	₹ 300.00	₹ 63.00
0203	Beldar	Day	0.83	₹ 300.00	₹ 249.00
	TOTAL				₹ 12,546.60
	Add for Carriage of all materials and ladder, scaffolding etc.	@	5.00%		₹ 627.33
	TOTAL				₹ 13,173.93
	Add for Sundries and contingencies	@	3%		₹ 395.22
	TOTAL				₹ 13,569.15
	Add 1% for water charges	@	1%		₹ 135.69
	TOTAL				₹ 13,704.84
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,055.73
	Cost for 17.37 mtr..				₹ 15,760.57
	Cost for 1.0 mtr.				₹ 907.34
	Say				₹ 907.30
18.35	Providing and fixing soil, waste and vent pipes :				
18.35.2	75 mm diameter :				
18.35.2.1	Sand cast iron S&S pipe as per IS: 1729.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 17.37 m				
	(1.8mx10)-(9x0.07m) = 17.37 m= 10 Nos 1.80 mtr long pipe.				
	MATERIALS				
18027	75 mm sand cast iron pipe single socket (1.80	each	10.50	₹ 800.00	₹ 8,400.00
	m long)				
	including 5% allowance for wastage (10 + 5%)=10.5				
	LABOUR				
0215	Fitter grade-I	Day	0.35	₹ 380.00	₹ 133.00
0201	Bandhani	Day	0.17	₹ 300.00	₹ 51.00
0203	Beldar	Day	0.70	₹ 300.00	₹ 210.00
	TOTAL				₹ 8,794.00
	Add for Carriage of all materials and ladder, scaffolding etc.	@	5.00%		₹ 439.70
	TOTAL				₹ 9,233.70
	Add for Sundries and contingencies	@	3%		₹ 277.01

	TOTAL				₹	9,510.71
	Add 1% for water charges	@	1%		₹	95.11
	TOTAL				₹	9,605.82
	Add 15% for contractor's profit and overheads	@	15%		₹	1,440.87
	Cost for 17.37 mtr..				₹	11,046.69
	Cost for 1.0 mtr.				₹	635.96
	Say				₹	636.00
17.35	Providing and fixing soil, waste and vent pipes :					
17.35.2	75 mm diameter:					
17.35.2.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 17.37 m					
	(1.8mx10)-(9x0.07m) = 17.37 m= 10 Nos 1.80 mtr long pipe.					
	MATERIALS					
18090	75 mm centrifugally cast (spun) iron S&S	each	10.50	₹ 1,000.00	₹	10,500.00
	pipes (1.80 m long)					
	including 5% allowance for wastage (10 + 5%)=10.5					
	LABOUR					
0215	Fitter grade-I	Day	0.35	₹ 380.00	₹	133.00
0201	Bandhani	Day	0.17	₹ 300.00	₹	51.00
0203	Beldar	Day	0.70	₹ 300.00	₹	210.00
	TOTAL				₹	10,894.00
	Add for Carriage of all materials and ladder, scaffolding etc.	@	5.00%		₹	544.70
	TOTAL				₹	11,438.70
	Add for Sundries and contingencies	@	3%		₹	343.16
	TOTAL				₹	11,781.86
	Add 1% for water charges	@	1%		₹	117.82
	TOTAL				₹	11,899.68
	Add 15% for contractor's profit and overheads	@	15%		₹	1,784.95
	Cost for 17.37 mtr..				₹	13,684.63
	Cost for 1.0 mtr.				₹	787.83
	Say				₹	787.80
17.35	Providing and fixing soil, waste and vent pipes :					
17.35.2	75 mm diameter:					
17.35.2.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 17.37 m					
	(1.8mx10)-(9x0.07m) = 17.37 m= 10 Nos 1.80 mtr long pipe.					
	MATERIALS					
18117	75 mm centrifugally cast (spun) iron S&S	each	10.50	₹ 420.00	₹	4,410.00
	pipes (1.80 m long)					
	including 5% allowance for wastage (10 + 5%)=10.5					
	LABOUR					
0215	Fitter grade-I	Day	0.35	₹ 380.00	₹	133.00
0201	Bandhani	Day	0.17	₹ 300.00	₹	51.00
0203	Beldar	Day	0.70	₹ 300.00	₹	210.00
	TOTAL				₹	4,804.00
	Add for Carriage of all materials and ladder, scaffolding etc.	@	5.00%		₹	240.20
	TOTAL				₹	5,044.20
	Add for Sundries and contingencies	@	3%		₹	151.33
	TOTAL				₹	5,195.53
	Add 1% for water charges	@	1%		₹	51.96
	TOTAL				₹	5,247.48
	Add 15% for contractor's profit and overheads	@	15%		₹	787.12
	Cost for 17.37 mtr..				₹	6,034.60
	Cost for 1.0 mtr.				₹	347.42
	Say				₹	347.40
18.36	Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2 (1 cement: 2 fine sand) in S.C.I./C.I. Pipes:					

18.36.1	75mm dia pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 joints				
	LABOUR				
0219	Mason 1st Class	Day	0.10	₹ 425.00	₹ 42.50
0215	Fitter grade-I	Day	0.30	₹ 380.00	₹ 114.00
0203	Beldar	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 246.50
	Add for Carriage of all materials and cost of Cement Slurry, Spun Yarn & Cement Mortar 1:2 etc.	@	12.00%		₹ 29.58
	TOTAL				₹ 276.08
	Add for Sundries and contingencies	@	3%		₹ 8.28
	TOTAL				₹ 284.36
	Add 1% for water charges	@	1%		₹ 2.84
	TOTAL				₹ 287.21
	Add 15% for contractor's profit and overheads	@	15%		₹ 43.08
	Cost for 5 joints				₹ 330.29
	Cost for per joint				₹ 66.06
	Say				₹ 66.10
18.36	Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2 (1 cement: 2 fine sand) in S.C.I./C.I. Pipes:				
18.36.2	100 mm dia pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 joints				
	LABOUR				
0219	Mason 1st Class	Day	0.10	₹ 425.00	₹ 42.50
0215	Fitter grade-I	Day	0.40	₹ 380.00	₹ 152.00
0203	Beldar	Day	0.35	₹ 300.00	₹ 105.00
	TOTAL				₹ 299.50
	Add for Carriage of all materials and cost of Cement Slurry, Spun Yarn & Cement Mortar 1:2 etc.	@	12.00%		₹ 35.94
	TOTAL				₹ 335.44
	Add for Sundries and contingencies	@	3%		₹ 10.06
	TOTAL				₹ 345.50
	Add 1% for water charges	@	1%		₹ 3.46
	TOTAL				₹ 348.96
	Add 15% for contractor's profit and overheads	@	15%		₹ 52.34
	Cost for 5 joints				₹ 401.30
	Cost for per joint				₹ 80.26
	Say				₹ 80.30
18.37	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/ cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :				
18.37.1	For 100 mm dia. Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 nos.				
	MATERIALS				
18004	M.S. holder bat clamps = 5 nos.	each	5.00	₹ 30.00	₹ 150.00
	LABOUR				
0215	Fitter grade-I	Day	0.125	₹ 380.00	₹ 47.50
0218	Mason (average)	Day	0.75	₹ 400.00	₹ 300.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	For Material C.C. Block 5x0.10x0x0.10= 0.005 cum				
04006	20 mm nominal size stone aggregate	cum	0.0033	₹ 3,969.00	₹ 13.10
04008	10 mm nominal size stone aggregate	cum	0.0011	₹ 700.00	₹ 0.77
405	Carriage of stone aggregate below 40 mm	cum	0.0044	₹ 159.75	₹ 0.70

	nominal size				
02003	Fine sand	cum	0.0022	₹ 370.00	₹ 0.81
425	Carriage of fine sand	cum	0.0022	₹ 142.63	₹ 0.31
03001	Cement	tonne	0.0016	₹ 6,100.00	₹ 9.76
421	Carriage of cement	tonne	0.0016	₹ 110.94	₹ 0.18
	Labour:				
0203	Beldar	Day	0.0045	₹ 300.00	₹ 1.35
0212	Coolies	Day	0.0032	₹ 300.00	₹ 0.96
0205	Bhishti	Day	0.0014	₹ 300.00	₹ 0.42
0219	Mason 1 st class	Day	0.0003	₹ 425.00	₹ 0.13
0220	Mason 2nd class	Day	0.0003	₹ 380.00	₹ 0.11
0224	Mate	Day	0.0002	₹ 300.00	₹ 0.06
	TOTAL				₹ 676.17
	Add for Carriage of bat clamps & Hire charges of machine, drill bits etc.	@	3.00%		₹ 20.29
	TOTAL				₹ 696.45
	Add for Sundries and contingencies	@	3%		₹ 20.89
	TOTAL				₹ 717.35
	Add 1% for water charges	@	1%		₹ 7.17
	TOTAL				₹ 724.52
	Add 15% for contractor's profit and overheads	@	15%		₹ 108.68
	Cost for 5 no bat clamps				₹ 833.20
	Cost for per bat clamp				₹ 166.64
	Say				₹ 166.60
18.37	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/ cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :				
18.37.2	For 75 mm dia. Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 nos.				
	MATERIALS				
18005	M.S. holder bat clamps = 5 nos.	each	5.00	₹ 27.00	₹ 135.00
	LABOUR				
0215	Fitter grade-I	Day	0.125	₹ 380.00	₹ 47.50
0218	Mason (average)	Day	0.750	₹ 400.00	₹ 300.00
0203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	C.C. Block 5x0.10x0.10x0.10= 0.005 cum				
04006	20 mm nominal size stone aggregate	cum	0.0033	₹ 3,969.00	₹ 13.10
04008	10 mm nominal size stone aggregate	cum	0.0011	₹ 4,040.00	₹ 4.44
405	Carriage of stone aggregate below 40 mm	cum	0.0044	₹ 159.75	₹ 0.70
	nominal size				
02003	Fine sand	cum	0.0022	₹ 370.00	₹ 0.81
425	Carriage of fine sand	cum	0.0022	₹ 142.63	₹ 0.31
03001	Cement	tonne	0.0016	₹ 6,100.00	₹ 9.76
421	Carriage of cement	tonne	0.0016	₹ 110.94	₹ 0.18
	Labour:				
0203	Beldar	Day	0.0045	₹ 300.00	₹ 1.35
0212	Coolies	Day	0.0032	₹ 300.00	₹ 0.96
0205	Bhishti	Day	0.0014	₹ 300.00	₹ 0.42
0219	Mason 1 st class	Day	0.0003	₹ 425.00	₹ 0.13
0220	Mason 2nd class	Day	0.0003	₹ 380.00	₹ 0.11
0224	Mate	Day	0.0002	₹ 300.00	₹ 0.06
	TOTAL				₹ 664.84
	Add for Carriage of bat clamps & Hire charges of machine, drill bits etc.	@	3.00%		₹ 19.95
	TOTAL				₹ 684.79
	Add for Sundries and contingencies	@	3%		₹ 20.54
	TOTAL				₹ 705.33
	Add 1% for water charges	@	1%		₹ 7.05
	TOTAL				₹ 712.38
	Add 15% for contractor's profit and overheads	@	15%		₹ 106.86

	Cost for 5 no bat clamps				₹ 819.24
	Cost for per bat clamp				₹ 163.85
	Say				₹ 163.80
18.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
18.38.1	100 mm				
18.38.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18032	100 mm dia sand cast iron bend with access	each	1.00	₹ 240.00	₹ 240.00
	door including cost of bolts and nuts				
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 302.50
	Add for Carriage of all materials & Ladder etc.	@	3.00%		₹ 9.08
	TOTAL				₹ 311.58
	Add for Sundries and contingencies	@	3%		₹ 9.35
	TOTAL				₹ 320.92
	Add 15% for contractor's profit and overheads	@	15%		₹ 48.14
	Cost for per bend				₹ 369.06
	Say				₹ 369.10
18.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
18.38.1	100 mm				
18.38.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18091	100 mm dia sand cast iron S &	each	1.00	₹ 270.00	₹ 270.00
	S bend with access door including cost of				
	bolts and nuts				
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 332.50
	Add for Carriage of all materials & Ladder etc.	@	3.00%		₹ 9.98
	TOTAL				₹ 342.48
	Add for Sundries and contingencies	@	3%		₹ 10.27
	TOTAL				₹ 352.75
	Add 15% for contractor's profit and overheads	@	15%		₹ 52.91
	Cost for per bend				₹ 405.66
	Say				₹ 405.70
18.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
18.38.2	75 mm dia				
18.38.2.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				

18031	75 mm sand cast iron bend with access door	each	1.00	₹ 170.00	₹ 170.00
	including cost of bolts and nuts				
18012	Insertion rubber washer 3 mm thick	each	1.00	₹ 15.00	₹ 15.00
	LABOUR				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 227.50
	Add for Carriage of all materials & Ladder etc.	@	3.00%		₹ 6.83
	TOTAL				₹ 234.33
	Add for Sundries and contingencies	@	3%		₹ 7.03
	TOTAL				₹ 241.35
	Add 15% for contractor's profit and overheads	@	15%		₹ 36.20
	Cost for per bend				₹ 277.56
	Say				₹ 277.60
18.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
18.38.2	75 mm dia				
18.38.2.2	Sand cast iron S&S as per IS- 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18092	75 mm dia sand cast iron S&S	each	1.00	₹ 230.00	₹ 230.00
	bend with access door including cost of bolts and nuts				
18012	Insertion rubber washer 3 mm thick	each	1.00	₹ 15.00	₹ 15.00
	LABOUR				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 287.50
	Add for Carriage of all materials & Ladder etc.	@	3.00%		₹ 8.63
	TOTAL				₹ 296.13
	Add for Sundries and contingencies	@	3%		₹ 8.88
	TOTAL				₹ 305.01
	Add 15% for contractor's profit and overheads	@	15%		₹ 45.75
	Cost for per bend				₹ 350.76
	Say				₹ 350.80
18.39	Providing and fixing plain bend of required degree.				
18.39.1	100 mm				
18.39.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18030	100 mm sand cast iron plain bend	each	1.00	₹ 240.00	₹ 240.00
	LABOUR				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 282.50
	Add for Carriage of all materials and & Ladder etc.	@	3.00%		₹ 8.48
	TOTAL				₹ 290.98
	Add for Sundries and contingencies	@	3%		₹ 8.73
	TOTAL				₹ 299.70
	Add 15% for contractor's profit and overheads	@	15%		₹ 44.96
	Cost for per bend				₹ 344.66
	Say				₹ 344.70

18.39	Providing and fixing plain bend of required degree.				
18.39.1	100 mm				
18.39.1.2	Sand cast iron S&S as per IS : 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18093	100 mm dia sand cast iron S & S Plain bend	each	1.00	₹ 250.00	₹ 250.00
	LABOUR				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 292.50
	Add for Carriage of all materials and & Ladder etc.	@	3.00%		₹ 8.78
	TOTAL				₹ 301.28
	Add for Sundries and contingencies	@	3%		₹ 9.04
	TOTAL				₹ 310.31
	Add 15% for contractor's profit and overheads	@	15%		₹ 46.55
	Cost for per bend				₹ 356.86
	Say				₹ 356.90
18.39	Providing and fixing plain bend of required degree.				
18.39.2	75 mm				
18.39.2.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18029	75 mm sand cast iron plain bend	each	1.00	₹ 180.00	₹ 180.00
	LABOUR				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 222.50
	Add for Carriage of all materials and & Ladder etc.	@	3.00%		₹ 6.68
	TOTAL				₹ 229.18
	Add for Sundries and contingencies	@	3%		₹ 6.88
	TOTAL				₹ 236.05
	Add 15% for contractor's profit and overheads	@	15%		₹ 35.41
	Cost for per bend				₹ 271.46
	Say				₹ 271.50
18.39	Providing and fixing plain bend of required degree.				
18.39.2	75 mm				
18.39.2.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18094	75 mm dia sand cast iron S&S Plain bend	each	1.00	₹ 190.00	₹ 190.00
	LABOUR				
0216	Foreman	Day	0.02	₹ 425.00	₹ 8.50
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 232.50
	Add for Carriage of all materials and & Ladder etc.	@	3.00%		₹ 6.98
	TOTAL				₹ 239.48
	Add for Sundries and contingencies	@	3%		₹ 7.18
	TOTAL				₹ 246.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 37.00
	Cost for per bend				₹ 283.66

	Say				₹ 283.70
18.40	Providing and fixing heel rest sanitary bend				
18.40.1	100 mm dia				
18.40.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18048	100 mm sand cast iron heel rest bend	each	1.00	₹ 270.00	₹ 270.00
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 316.75
	Add for Carriage of all materials and rubber washer, bolts, nuts & Ladder etc.	@	7.00%		₹ 22.17
	TOTAL				₹ 338.92
	Add for Sundries and contingencies	@	3%		₹ 10.17
	TOTAL				₹ 349.09
	Add 15% for contractor's profit and overheads	@	15%		₹ 52.36
	Cost for per bend				₹ 401.45
	Say				₹ 401.50
18.40	Providing and fixing heel rest sanitary bend				
18.40.1	100 mm dia				
18.40.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18095	100 mm dia sand cast iron S & S	each	1.00	₹ 300.00	₹ 300.00
	heel rest sanitary bend				
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 346.75
	Add for Carriage of all materials and rubber washer, bolts, nuts & Ladder etc.	@	7.00%		₹ 24.27
	TOTAL				₹ 371.02
	Add for Sundries and contingencies	@	3%		₹ 11.13
	TOTAL				₹ 382.15
	Add 15% for contractor's profit and overheads	@	15%		₹ 57.32
	Cost for per bend				₹ 439.48
	Say				₹ 439.50
18.40	Providing and fixing heel rest sanitary bend				
18.40.2	75 mm				
18.40.2.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18047	75 mm sand cast iron heel rest bend	each	1.00	₹ 230.00	₹ 230.00
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 276.75
	Add for Carriage of all materials and rubber washer, bolts, nuts & Ladder etc.	@	7.00%		₹ 19.37
	TOTAL				₹ 296.12

	Add for Sundries and contingencies	@	3%		₹	8.88
	TOTAL				₹	305.01
	Add 15% for contractor's profit and overheads	@	15%		₹	45.75
	Cost for per bend				₹	350.76
	Say				₹	350.80
18.40	Providing and fixing heel rest sanitary bend					
18.40.2	75 mm					
18.40.2.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18096	75 mm dia sand cast iron S&S	each	1.00	₹ 260.00	₹	260.00
	heel rest sanitary bend					
	LABOUR					
0216	Foreman	Day	0.03	₹ 425.00	₹	12.75
0215	Fitter grade-I	Day	0.05	₹ 380.00	₹	19.00
0212	Helper	Day	0.05	₹ 300.00	₹	15.00
	TOTAL				₹	306.75
	Add for Carriage of all materials and rubber washer, bolts, nuts & Ladder etc.	@	7.00%		₹	21.47
	TOTAL				₹	328.22
	Add for Sundries and contingencies	@	3%		₹	9.85
	TOTAL				₹	338.07
	Add 15% for contractor's profit and overheads	@	15%		₹	50.71
	Cost for one no.				₹	388.78
	Say				₹	388.80
18.41	Providing and fixing double equal junction of required degree with access door,insertion rubber washer 3 mm thick, bolts and nuts complete :					
18.41.1	100x100x100x100mm					
18.41.1.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18040	100x100x100x100 mm sand cast iron double	each	1.00	₹ 550.00	₹	550.00
	equal junction with access door including cost					
	of bolts and nuts					
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹	20.00
	LABOUR					
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹	22.80
0212	Helper	Day	0.0600	₹ 300.00	₹	18.00
	TOTAL				₹	610.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹	30.54
	TOTAL				₹	641.34
	Add for Sundries and contingencies	@	3%		₹	19.24
	TOTAL				₹	660.58
	Add 15% for contractor's profit and overheads	@	15%		₹	99.09
	Cost for one no.				₹	759.67
	Say				₹	759.70
18.41	Providing and fixing double equal junction of required degree with access door,insertion rubber washer 3 mm thick, bolts and nuts complete :					
18.41.1	100x100x100x100mm					
18.41.1.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18103	100x 100x 100x 100 mm sand	each	1.00	₹ 620.00	₹	620.00
	cast iron S&S double equal junction					
	with access door including cost of bolts and nuts					
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹	20.00

	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 680.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 34.04
	TOTAL				₹ 714.84
	Add for Sundries and contingencies	@	3%		₹ 21.45
	TOTAL				₹ 736.29
	Add 15% for contractor's profit and overheads	@	15%		₹ 110.44
	Cost for one no.				₹ 846.73
	Say				₹ 846.70
18.41	Providing and fixing double equal junction of required degree with access door,insertion rubber washer 3 mm thick, bolts and nuts complete :				
18.41.2	75x75x75x75 mm				
18.41.2.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18039	75x75x75x75 mm sand cast iron double equal	each	1.00	₹ 430.00	₹ 430.00
	junction with access door including cost of				
	bolts and nuts				
18012	Insertion rubber washer 3 mm thick	each	1.00	₹ 15.00	₹ 15.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 485.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 24.29
	TOTAL				₹ 510.09
	Add for Sundries and contingencies	@	3%		₹ 15.30
	TOTAL				₹ 525.39
	Add 15% for contractor's profit and overheads	@	15%		₹ 78.81
	Cost for one no.				₹ 604.20
	Say				₹ 604.20
18.41	Providing and fixing double equal junction of required degree with access door,insertion rubber washer 3 mm thick, bolts and nuts complete :				
18.41.2	75x75x75x75 mm				
18.41.2.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18104	75x75x75x75 mm sand cast	each	1.00	₹ 480.00	₹ 480.00
	iron S&S double equal junction with access				
	door including cost of bolts and nuts				
18012	Insertion rubber washer 3 mm thick	each	1.00	₹ 15.00	₹ 15.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 535.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 26.79
	TOTAL				₹ 562.59
	Add for Sundries and contingencies	@	3%		₹ 16.88
	TOTAL				₹ 579.47
	Add 15% for contractor's profit and overheads	@	15%		₹ 86.92
	Cost for one no.				₹ 666.39
	Say				₹ 666.40
18.42	Providing and fixing double equal plain junction of required degree.				
18.42.1	100x100x100x100 mm				
18.42.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				

	MATERIALS				
18038	100x100x100x100 mm sand cast iron double	each	1.00	₹ 550.00	₹ 550.00
	equal plain junction				
	LABOUR				
0215	Fitter grade-I	Day	0.0400	₹ 380.00	₹ 15.20
0212	Helper	Day	0.0400	₹ 300.00	₹ 12.00
	TOTAL				₹ 577.20
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 28.86
	TOTAL				₹ 606.06
	Add for Sundries and contingencies	@	3%		₹ 18.18
	TOTAL				₹ 624.24
	Add 15% for contractor's profit and overheads	@	15%		₹ 93.64
	Cost for one no.				₹ 717.88
	Say				₹ 717.90
18.42	Providing and fixing double equal plain junction of required degree.				
17.42.1	100x100x100x100 mm				
18.42.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18101	100x100x100x100 mm. sand	each	1.00	₹ 620.00	₹ 620.00
	cast iron S&S double equal plain junction				
	LABOUR				
0215	Fitter grade-I	Day	0.0400	₹ 380.00	₹ 15.20
0212	Helper	Day	0.0400	₹ 300.00	₹ 12.00
	TOTAL				₹ 647.20
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 32.36
	TOTAL				₹ 679.56
	Add for Sundries and contingencies	@	3%		₹ 20.39
	TOTAL				₹ 699.95
	Add 15% for contractor's profit and overheads	@	15%		₹ 104.99
	Cost for one no.				₹ 804.94
	Say				₹ 804.90
18.42	Providing and fixing double equal plain junction of required degree.				
18.42.2	75x75x75x75 mm				
18.42.2.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18037	75x75x75x75 mm sand cast iron double equal	each	1.00	₹ 420.00	₹ 420.00
	plain junction				
	LABOUR				
0215	Fitter grade-I	Day	0.0400	₹ 380.00	₹ 15.20
0212	Helper	Day	0.0400	₹ 300.00	₹ 12.00
	TOTAL				₹ 447.20
	Add for Carriage of all materials & Ladder etc.	@	4.00%		₹ 17.89
	TOTAL				₹ 465.09
	Add for Sundries and contingencies	@	3%		₹ 13.95
	TOTAL				₹ 479.04
	Add 15% for contractor's profit and overheads	@	15%		₹ 71.86
	Cost for one no.				₹ 550.90
	Say				₹ 550.90
18.42	Providing and fixing double equal plain junction of required degree.				

18.42.2	75x75x75x75 mm				
18.42.2.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18102	75x75x75x75 mm sand cast	each	1.00	₹ 500.00	₹ 500.00
	iron S&S double equal plain junction				
	LABOUR				
0215	Fitter grade-I	Day	0.0400	₹ 380.00	₹ 15.20
0212	Helper	Day	0.0400	₹ 300.00	₹ 12.00
	TOTAL				₹ 527.20
	Add for Carriage of all materials & Ladder etc.	@	4.00%		₹ 21.09
	TOTAL				₹ 548.29
	Add for Sundries and contingencies	@	3%		₹ 16.45
	TOTAL				₹ 564.74
	Add 15% for contractor's profit and overheads	@	15%		₹ 84.71
	Cost for one no.				₹ 649.45
	Say				₹ 649.40
18.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
18.43.1	100x100x100 mm				
18.43.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18036	100x100x100 mm single equal plain junction	each	1.00	₹ 375.00	₹ 375.00
	with access door including cost of bolts and Nuts				
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0215	Fitter grade-I	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 429.00
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 32.18
	TOTAL				₹ 461.18
	Add for Sundries and contingencies	@	3%		₹ 13.84
	TOTAL				₹ 475.01
	Add 15% for contractor's profit and overheads	@	15%		₹ 71.25
	Cost for one no.				₹ 546.26
	Say				₹ 546.30
18.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
18.43.1	100x100x100 mm				
18.43.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18099	100x100x100 mm sand cast	each	1.00	₹ 500.00	₹ 500.00
	iron S&S single equal plain junction with				
	access door including cost of bolts and nuts				
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0215	Fitter grade-I	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 554.00
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 41.55
	TOTAL				₹ 595.55
	Add for Sundries and contingencies	@	3%		₹ 17.87
	TOTAL				₹ 613.42
	Add 15% for contractor's profit and overheads	@	15%		₹ 92.01

	Cost for one no.				₹ 705.43
	Say				₹ 705.40
18.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
18.43.2	75x75x75 mm				
18.43.2.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18035	75x75x75 mm single equal plain junction with	each	1.00	₹ 275.00	₹ 275.00
	access door including cost of bolts and nuts				
18012	Insertion rubber washer 3 mm thick	each	1.00	₹ 15.00	₹ 15.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 330.80
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 24.81
	TOTAL				₹ 355.61
	Add for Sundries and contingencies	@	3%		₹ 10.67
	TOTAL				₹ 366.28
	Add 15% for contractor's profit and overheads	@	15%		₹ 54.94
	Cost for one no.				₹ 421.22
	Say				₹ 421.20
18.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
18.43.2	75x75x75 mm				
18.43.2.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18100	75x75x75 mm sand cast iron S	each	1.00	₹ 370.00	₹ 370.00
	& S single equal plain junction with access				
	door including cost of bolts and nuts				
18012	Insertion rubber washer 3 mm thick	each	1.00	₹ 15.00	₹ 15.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 425.80
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 31.94
	TOTAL				₹ 457.74
	Add for Sundries and contingencies	@	3%		₹ 13.73
	TOTAL				₹ 471.47
	Add 15% for contractor's profit and overheads	@	15%		₹ 70.72
	Cost for one no.				₹ 542.19
	Say				₹ 542.20
18.44	Providing and fixing single equal plain junction of required degree				
18.44.1	100x100x100 mm				
18.44.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18034	100x100x100 mm sand cast iron single equal plain junction	each	1.00	₹ 360.00	₹ 360.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 400.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 20.04
	TOTAL				₹ 420.84

	Add for Sundries and contingencies	@	3%		₹	12.63
	TOTAL				₹	433.47
	Add 15% for contractor's profit and overheads	@	15%		₹	65.02
	Cost for one no.				₹	498.48
	Say				₹	498.50
18.44	Providing and fixing single equal plain junction of required degree					
18.44.1	100x100x100 mm					
18.44.1.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18097	100 x 100 x 100 mm sand cast	each	1.00	₹ 500.00	₹	500.00
	iron S&S single equal plain junction					
	LABOUR					
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹	22.80
0212	Helper	Day	0.0600	₹ 300.00	₹	18.00
	TOTAL				₹	540.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹	27.04
	TOTAL				₹	567.84
	Add for Sundries and contingencies	@	3%		₹	17.04
	TOTAL				₹	584.88
	Add 15% for contractor's profit and overheads	@	15%		₹	87.73
	Cost for one no.				₹	672.61
	Say				₹	672.60
18.44	Providing and fixing single equal plain junction of required degree					
18.44.2	75x75x75 mm					
18.44.2.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18033	75x75x75 mm sand cast iron single equal plain junction	each	1.00	₹ 260.00	₹	260.00
	LABOUR					
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹	22.80
0212	Helper	Day	0.0600	₹ 300.00	₹	18.00
	TOTAL				₹	300.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹	15.04
					₹	315.84
	Add for Sundries and contingencies	@	3%		₹	9.48
	TOTAL				₹	325.32
	Add 15% for contractor's profit and overheads	@	15%		₹	48.80
	Cost for one no.				₹	374.11
	Say				₹	374.10
18.44	Providing and fixing single equal plain junction of required degree:					
18.44.2	75x75x75 mm					
18.44.2.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18098	75x75x75 mm sand cast iron	each	1.00	₹ 276.00	₹	276.00
	S&S single equal plain junction					
	LABOUR					
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹	22.80
0212	Helper	Day	0.0600	₹ 300.00	₹	18.00
	TOTAL				₹	316.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹	15.84
	TOTAL				₹	332.64
	Add for Sundries and contingencies	@	3%		₹	9.98
	TOTAL				₹	342.62
	Add 15% for contractor's profit and overheads	@	15%		₹	51.39
	Cost for one no.				₹	394.01
	Say				₹	394.00
18.45	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :					

18.45.1	100x100x75x75 mm				
18.45.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18046	100x100x75x75 mm sand cast iron branch	each	1.00	₹ 550.00	₹ 550.00
	with access door including cost of bolts and nuts				
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 610.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 30.54
	TOTAL				₹ 641.34
	Add for Sundries and contingencies	@	3%		₹ 19.24
	TOTAL				₹ 660.58
	Add 15% for contractor's profit and overheads	@	15%		₹ 99.09
	Cost for one no.				₹ 759.67
	Say				₹ 759.70
18.45	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :				
18.45.1	100x100x75x75 mm				
18.45.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18108	100x100x75x75 mm sand cast	each	1.00	₹ 775.00	₹ 775.00
	iron S&S double unequal junction with				
	access door including cost of bolts and nuts				
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 835.80
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 41.79
	TOTAL				₹ 877.59
	Add for Sundries and contingencies	@	3%		₹ 26.33
	TOTAL				₹ 903.92
	Add 15% for contractor's profit and overheads	@	15%		₹ 135.59
	Cost for one no.				₹ 1,039.51
	Say				₹ 1,039.50
18.46	Providing and fixing double unequal plain junction of required degree:				
18.46.1	100x100x75x75 mm				
18.46.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18045	100X100X75X75 mm junction	each	1.00	₹ 500.00	₹ 500.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 540.80
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 40.56
	TOTAL				₹ 581.36
	Add for Sundries and contingencies	@	3%		₹ 17.44
	TOTAL				₹ 598.80
	Add 15% for contractor's profit and overheads	@	15%		₹ 89.82
	Cost for one no.				₹ 688.62

	Say				₹ 688.60
18.46	Providing and fixing double unequal plain junction of required degree:				
18.46.1	100x100x75x75 mm				
18.46.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18107	100x100x75x75 mm sand cast	each	1.00	₹ 880.00	₹ 880.00
	iron S&S double unequal plain junction				
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 920.80
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 69.06
	TOTAL				₹ 989.86
	Add for Sundries and contingencies	@	3%		₹ 29.70
	TOTAL				₹ 1,019.56
	Add 15% for contractor's profit and overheads	@	15%		₹ 152.93
	Cost for one no.				₹ 1,172.49
	Say				₹ 1,172.50
18.47	Providing and fixing single unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :				
18.47.1	100x100x75 mm				
18.47.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18044	100x100x75 mm S.C.I, single unequal	each	1.00	₹ 400.00	₹ 400.00
	junction with access door including cost of				
	bolts and nuts				
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0215	Fitter grade-I	Day	0.0600	₹ 380.00	₹ 22.80
0212	Helper	Day	0.0600	₹ 300.00	₹ 18.00
	TOTAL				₹ 460.80
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 34.56
	TOTAL				₹ 495.36
	Add for Sundries and contingencies	@	3%		₹ 14.86
	TOTAL				₹ 510.22
	Add 15% for contractor's profit and overheads	@	15%		₹ 76.53
	Cost for one no.				₹ 586.75
	Say				₹ 586.80
18.47	Providing and fixing single unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :				
18.47.1	100x100x75 mm				
18.47.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18106	100x100x75 mm sand cast iron	each	1.00	₹ 650.00	₹ 650.00
	S&S single unequal junction with access				
	door including cost of bolts and nuts				
18013	Insertion rubber washer 3 mm thick	each	1.00	₹ 20.00	₹ 20.00

	LABOUR				
0215	Fitter grade-I	Day	0.080	₹ 380.00	₹ 30.40
0212	Helper	Day	0.080	₹ 300.00	₹ 24.00
	TOTAL				₹ 724.40
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 54.33
	TOTAL				₹ 778.73
	Add for Sundries and contingencies	@	3%		₹ 23.36
	TOTAL				₹ 802.09
	Add 15% for contractor's profit and overheads	@	15%		₹ 120.31
	Cost for one no.				₹ 922.41
	Say				₹ 922.40
18.48	Providing and fixing single unequal plain junction of required degree :				
18.48.1	100x100x75 mm				
18.48.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18043	100X100X75 mm junction	each	1.00	₹ 380.00	₹ 380.00
	LABOUR				
0215	Fitter grade-I	Day	0.0875	₹ 380.00	₹ 33.25
0212	Helper	Day	0.0875	₹ 300.00	₹ 26.25
	TOTAL				₹ 439.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 32.96
	TOTAL				₹ 472.46
	Add for Sundries and contingencies	@	3%		₹ 14.17
	TOTAL				₹ 486.64
	Add 15% for contractor's profit and overheads	@	15%		₹ 73.00
	Cost for one no.				₹ 559.63
	Say				₹ 559.60
18.48	Providing and fixing single unequal plain junction of required degree				
18.48.1	100x100x75 mm				
18.48.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18105	100x100x75 mm sand cast iron	each	1.00	₹ 600.00	₹ 600.00
	S&S single unequal plain junction				
	LABOUR				
0215	Fitter grade-I	Day	0.0875	₹ 380.00	₹ 33.25
0212	Helper	Day	0.0875	₹ 300.00	₹ 26.25
	TOTAL				₹ 659.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹ 49.46
	TOTAL				₹ 708.96
	Add for Sundries and contingencies	@	3%		₹ 21.27
	TOTAL				₹ 730.23
	Add 15% for contractor's profit and overheads	@	15%		₹ 109.53
	Cost for one no.				₹ 839.77
	Say				₹ 839.80
18.49	Providing and fixing double equal plain invert branch of required degree:				
18.49.1	100x100x100x100mm				
18.49.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
MATERIALS					
18052	100X100X100x100 mm sand cast iron invert branch	each	1.00	₹ 570.00	₹ 570.00
	LABOUR				
0215	Fitter grade-I	Day	0.0875	₹ 380.00	₹ 33.25
0212	Helper	Day	0.0875	₹ 300.00	₹ 26.25
	TOTAL				₹ 629.50

	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	47.21
	TOTAL				₹	676.71
	Add for Sundries and contingencies	@	3%		₹	20.30
	TOTAL				₹	697.01
	Add 15% for contractor's profit and overheads	@	15%		₹	104.55
	Cost for one no.				₹	801.57
	Say				₹	801.60
18.49	Providing and fixing double equal plain invert branch of required degree:					
18.49.1	100x100x100x100mm					
18.49.1.2	Sand cast iron S&S as per IS 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18111	100x 100x 100 x 100 mm send	each	1.00	₹ 580.00	₹	580.00
	cast iron S&S double equal plain invert branch					
	LABOUR					
0215	Fitter grade-I	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	639.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	47.96
	TOTAL				₹	687.46
	Add for Sundries and contingencies	@	3%		₹	20.62
	TOTAL				₹	708.09
	Add 15% for contractor's profit and overheads	@	15%		₹	106.21
	Cost for one no.				₹	814.30
	Say				₹	814.30
18.49	Providing and fixing double equal plain invert branch of required degree:					
18.49.2	75x75x75x75 mm					
18.49.2.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18051	75X75X75x75 mm sand cast iron invert branch	each	1.00	₹ 420.00	₹	420.00
	LABOUR					
0215	Fitter grade-I	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	479.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	35.96
	TOTAL				₹	515.46
	Add for Sundries and contingencies	@	3%		₹	15.46
	TOTAL				₹	530.93
	Add 15% for contractor's profit and overheads	@	15%		₹	79.64
	Cost for one no.				₹	610.57
	Say				₹	610.60
18.49	Providing and fixing double equal plain invert branch of required degree:					
18.49.2	75x75x75x75 mm					
18.49.2.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18112	75x75x75x75 mm centrifugally cast(spun)	each	1.00	₹ 460.00	₹	460.00
	iron S&S double equal plain invert branch					
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	519.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	38.96
	TOTAL				₹	558.46

	Add for Sundries and contingencies	@	3%		₹	16.75
	TOTAL				₹	575.22
	Add 15% for contractor's profit and overheads	@	15%		₹	86.28
	Cost for one no.				₹	661.50
	Say				₹	661.50
18.50	Providing and fixing single equal plain invert branch of required degree:					
18.50.1	100x100x100 mm					
18.50.1.1	Sand cast iron S&S as per iron 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18050	100X100X100 mm sand cast iron invert branch	each	1.00	₹ 430.00	₹	430.00
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	489.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	36.71
	TOTAL				₹	526.21
	Add for Sundries and contingencies	@	3%		₹	15.79
	TOTAL				₹	542.00
	Add 15% for contractor's profit and overheads	@	15%		₹	81.30
	Cost for one no.				₹	623.30
	Say				₹	623.30
18.50	Providing and fixing single equal plain invert branch of required degree:					
18.50.1	100x100x100 mm					
18.50.1.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18109	100x100x100 mm sand cast	each	1.00	₹ 440.00	₹	440.00
	iron S&S single equal plain invert branch					
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	499.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	37.46
	TOTAL				₹	536.96
	Add for Sundries and contingencies	@	3%		₹	16.11
	TOTAL				₹	553.07
	Add 15% for contractor's profit and overheads	@	15%		₹	82.96
	Cost for one no.				₹	636.03
	Say				₹	636.00
18.50	Providing and fixing single equal plain invert branch of required degree:					
18.50.2	75x75x75 mm					
18.50.2.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18049	75X75X75 mm sand cast-iron invert branch	each	1.00	₹ 320.00	₹	320.00
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	379.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	28.46

	TOTAL				₹	407.96
	Add for Sundries and contingencies	@	3%		₹	12.24
	TOTAL				₹	420.20
	Add 15% for contractor's profit and overheads	@	15%		₹	63.03
	Cost for one no.				₹	483.23
	Say				₹	483.20
18.50	Providing and fixing single equal plain invert branch of required degree:					
18.50.2	75x75x75 mm					
18.50.2.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18110	75x75x75 mm sand cast iron S	each	1.00	₹ 350.00	₹	350.00
	& S single equal plain invert branch					
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	409.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	30.71
	TOTAL				₹	440.21
	Add for Sundries and contingencies	@	3%		₹	13.21
	TOTAL				₹	453.42
	Add 15% for contractor's profit and overheads	@	15%		₹	68.01
	Cost for one no.				₹	521.43
	Say				₹	521.40
18.51	Providing and fixing double unequal invert branch of required degree					
18.51.1	100x100x75x75 mm					
18.51.1.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
MATERIALS						
18054	100X100X75x75 mm sand cast iron invert branch	each	1.00	₹ 600.00	₹	600.00
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	659.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	49.46
	TOTAL				₹	708.96
	Add for Sundries and contingencies	@	3%		₹	21.27
	TOTAL				₹	730.23
	Add 15% for contractor's profit and overheads	@	15%		₹	109.53
	Cost for one no.				₹	839.77
	Say				₹	839.80
17.51	Providing and fixing double unequal invert branch of required degree					
17.51.1	100x100x75x75 mm					
17.51.1.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18114	100x100x75x75 mm sand cast	each	1.00	₹ 800.00	₹	800.00
	iron S&S double unequal plain invert branch					
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25

	TOTAL				₹	859.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	64.46
	TOTAL				₹	923.96
	Add for Sundries and contingencies	@	3%		₹	27.72
	TOTAL				₹	951.68
	Add 15% for contractor's profit and overheads	@	15%		₹	142.75
	Cost for one no.				₹	1,094.43
	Say				₹	1,094.40
18.52	Providing and fixing single unequal plain invert branch of required degree :					
18.52.1	100x100x75 mm					
18.52.1.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18053	100X100X75 mm sand cast iron invert branch each		1.00	₹ 510.00	₹	510.00
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	569.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	42.71
	TOTAL				₹	612.21
	Add for Sundries and contingencies	@	3%		₹	18.37
	TOTAL				₹	630.58
	Add 15% for contractor's profit and overheads	@	15%		₹	94.59
	Cost for one no.				₹	725.17
	Say				₹	725.20
18.52	Providing and fixing single unequal plain invert branch of required degree :					
18.52.1	100x100x75 mm					
18.52.1.1	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18113	100x100x75 mm sand cast iron	each	1.00	₹ 590.00	₹	590.00
	S&S single unequal plain invert branch					
	LABOUR					
0215	Fitter (grade-I)	Day	0.0875	₹ 380.00	₹	33.25
0212	Helper	Day	0.0875	₹ 300.00	₹	26.25
	TOTAL				₹	649.50
	Add for Carriage of all materials & Ladder etc.	@	7.50%		₹	48.71
	TOTAL				₹	698.21
	Add for Sundries and contingencies	@	3%		₹	20.95
	TOTAL				₹	719.16
	Add 15% for contractor's profit and overheads	@	15%		₹	107.87
	Cost for one no.				₹	827.03
	Say				₹	827.00
18.53	Providing and fixing sand cast iron S&S offsets as per IS: 1729					
18.53.1	76 mm offsets					
18.53.1.1	With 75 mm dia. pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18128	76 mm sand cast iron S&S offset with 75 mm each		1.00	₹ 175.00	₹	175.00
	dia pipe					

	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 209.00
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 10.45
	TOTAL				₹ 219.45
	Add for Sundries and contingencies	@	3%		₹ 6.58
	TOTAL				₹ 226.03
	Add 15% for contractor's profit and overheads	@	15%		₹ 33.91
	Cost for one no.				₹ 259.94
	Say				₹ 259.90
18.53	Providing and fixing sand cast iron S&S offsets as per IS: 1729				
18.53.1	76 mm offsets				
18.53.1.2	With 100 mm dia. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18129	76 mm sand cast iron S&S offset with 100 mm each		1.00	₹ 300.00	₹ 300.00
	dia pipe				
	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 334.00
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 16.70
	TOTAL				₹ 350.70
	Add for Sundries and contingencies	@	3%		₹ 10.52
	TOTAL				₹ 361.22
	Add 15% for contractor's profit and overheads	@	15%		₹ 54.18
	Cost for one no.				₹ 415.40
	Say				₹ 415.40
18.53:	Providing and fixing sand cast iron S&S offsets as per IS: 1729				
18.53.2:	114 mm offsets				
18.53.2.1:	With 75 mm dia. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18118	114 mm sand cast iron S&S offset with 75 mm each		1.00	₹ 305.00	₹ 305.00
	dia pipe				
	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 339.00
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 16.95
	TOTAL				₹ 355.95
	Add for Sundries and contingencies	@	3%		₹ 10.68
	TOTAL				₹ 366.63
	Add 15% for contractor's profit and overheads	@	15%		₹ 54.99
	Cost for one no.				₹ 421.62
	Say				₹ 421.60
18.53:	Providing and fixing sand cast iron S&S offsets as per IS: 1729				
18.53.2:	114 mm offsets				
18.53.2.2	With 100 mm dia. Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				

18119	114 mm sand cast iron S&S offset with 100	each	1.00	₹ 400.00	₹ 400.00
	mm dia pipe				
	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 434.00
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 21.70
	TOTAL				₹ 455.70
	Add for Sundries and contingencies	@	3%		₹ 13.67
	TOTAL				₹ 469.37
	Add 15% for contractor's profit and overheads	@	15%		₹ 70.41
	Cost for one no.				₹ 539.78
	Say				₹ 539.80
18.53:	Providing and fixing sand cast iron S&S offsets as per IS: 1729				
18.53.3	152 mm offsets				
18.53.3.1	With 75 mm dia. Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18120	152 mm sand cast iron S&S offset with 75 mm each		1.00	₹ 390.00	₹ 390.00
	dia pipe				
	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 424.00
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 21.20
	TOTAL				₹ 445.20
	Add for Sundries and contingencies	@	3%		₹ 13.36
	TOTAL				₹ 458.56
	Add 15% for contractor's profit and overheads	@	15%		₹ 68.78
	Cost for one no.				₹ 527.34
	Say				₹ 527.30
18.53:	Providing and fixing sand cast iron S&S offsets as per IS: 1729				
18.53.3	152 mm offsets				
18.53.3.2	With 100 mm dia. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18121	152 mm sand cast iron S&S offset with 100	each	1.00	₹ 490.00	₹ 490.00
	mm dia pipe				
	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 524.00
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 26.20
	TOTAL				₹ 550.20
	Add for Sundries and contingencies	@	3%		₹ 16.51
	TOTAL				₹ 566.71
	Add 15% for contractor's profit and overheads	@	15%		₹ 85.01
	Cost for one no.				₹ 651.71
	Say				₹ 651.70
18.54 :	Providing and fixing sand cast iron S&S offsets as per IS: 3989.				
18.54.1:	75 mm offsets				

18.54.1.1:	With 75 mm dia. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18115	75 mm sand cast iron S&S	each	1.00	₹ 250.00	₹ 250.00
	offset with 75 mm dia pipe				
	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 284.00
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 14.20
	TOTAL				₹ 298.20
	Add for Sundries and contingencies	@	3%		₹ 8.95
	TOTAL				₹ 307.15
	Add 15% for contractor's profit and overheads	@	15%		₹ 46.07
	Cost for one no.				₹ 353.22
	Say				₹ 353.20
18.54	Providing and fixing sand cast iron S&S offsets as per IS: 3989.				
18.54.2	150 mm offsets				
18.54.2.1	With 75 mm dia. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18116	150 mm sandcast iron S&S	each	1.00	₹ 310.00	₹ 310.00
	offset with 75 mm dia pipe				
	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 344.00
	Add for Carriage of all materials & Ladder etc.	@	5.00%		₹ 17.20
	TOTAL				₹ 361.20
	Add for Sundries and contingencies	@	3%		₹ 10.84
	TOTAL				₹ 372.04
	Add 15% for contractor's profit and overheads	@	15%		₹ 55.81
	Cost for one no.				₹ 427.84
	Say				₹ 427.80
17.54	Providing and fixing sand cast iron S&S offsets as per IS: 3989.				
17.54.2	150 mm offsets				
17.54.2.2	With 100 mm dia. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18,117	150 mm sand cast iron S&S	each	1.00	₹ 420.00	₹ 420.00
	offset with 100 mm dia pipe				
	LABOUR				
0215	Fitter (grade-I)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 454.00
	Add for Carriage of all materials & Ladder etc.	@	12.00%		₹ 54.48
	TOTAL				₹ 508.48
	Add for Sundries and contingencies	@	3%		₹ 15.25
	TOTAL				₹ 523.73
	Add 15% for contractor's profit and overheads	@	15%		₹ 78.56
	Cost for one no.				₹ 602.29
	Say				₹ 602.30

18.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete				
18.55.1	100mm				
1.55.1.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18056	100 mm sand cast iron door piece including cost of bolts and nuts	each	1.00	₹ 340.00	₹ 340.00
18013	Insertion rubber washer	each	1.00	₹ 20.00	₹ 20.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.060	₹ 380.00	₹ 22.80
0212	Helper	Day	0.060	₹ 300.00	₹ 18.00
	TOTAL				₹ 400.80
	Add for Carriage of all materials & Ladder ,binding materials etc.	@	3.00%		₹ 10.02
	TOTAL				₹ 410.82
	Add for Sundries and contingencies	@	3%		₹ 12.32
	TOTAL				₹ 423.14
	Add 15% for contractor's profit and overheads	@	15%		₹ 63.47
	Cost for one no.				₹ 486.62
	Say				₹ 486.60
18.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete				
18.55.1	100 mm				
1.55.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18122	100 mm sand cast iron S&S	each	1.00	₹ 320.00	₹ 320.00
	door piece including cost of bolts and nuts				
18013	Insertion rubber washer	each	1.00	₹ 20.00	₹ 12.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.060	₹ 380.00	₹ 22.80
0212	Helper	Day	0.060	₹ 300.00	₹ 18.00
	TOTAL				₹ 372.80
	Add for Carriage of all materials & Ladder ,binding materials etc.	@	3.00%		₹ 11.18
	TOTAL				₹ 383.98
	Add for Sundries and contingencies	@	3%		₹ 11.52
	TOTAL				₹ 395.50
	Add 15% for contractor's profit and overheads	@	15%		₹ 59.33
	Cost for one no.				₹ 454.83
	Say				₹ 454.80
18.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete				
18.55.2	75 mm				
18.55.2.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18055	75 mm sand cast iron door piece including	each	1.00	₹ 280.00	₹ 280.00
	cost of bolts and nuts				
18012	Insertion rubber washer	each	1.00	₹ 15.00	₹ 15.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.060	₹ 380.00	₹ 22.80
0212	Helper	Day	0.060	₹ 300.00	₹ 18.00
	TOTAL				₹ 335.80
	Add for Carriage of all materials & Ladder ,binding materials etc.	@	3.00%		₹ 8.40

	TOTAL				₹	344.20
	Add for Sundries and contingencies	@	3%		₹	10.33
	TOTAL				₹	354.52
	Add 15% for contractor's profit and overheads	@	15%		₹	53.18
	Cost for one no.				₹	407.70
	Say				₹	407.70
18.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete					
18.55.2	75 mm					
18.55.2.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18123	75 mm sand cast iron S&S	each	1.00	₹ 240.00	₹	240.00
	door piece including cost of bolts and nuts					
18012	Insertion rubber washer	each	1.00	₹ 15.00	₹	15.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.060	₹ 380.00	₹	22.80
0212	Helper	Day	0.060	₹ 300.00	₹	18.00
	TOTAL				₹	295.80
	Add for Carriage of all materials & Ladder ,binding materials etc.	@	3.00%		₹	8.87
	TOTAL				₹	304.67
	Add for Sundries and contingencies	@	3%		₹	9.14
	TOTAL				₹	313.81
	Add 15% for contractor's profit and overheads	@	15%		₹	47.07
	Cost for one no.				₹	360.89
	Say				₹	360.90
18.56	Providing and fixing terminal guard:					
18.56.1	100 mm					
18.56.1.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18042	100 mm sand cast iron terminal guard	each	1.00	₹ 160.00	₹	160.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.080	₹ 380.00	₹	30.40
0212	Helper	Day	0.080	₹ 300.00	₹	24.00
	TOTAL				₹	214.40
	Add for Carriage of all materials etc.	@	1.00%		₹	2.14
	TOTAL				₹	216.54
	Add for Sundries and contingencies	@	3%		₹	6.50
	TOTAL				₹	223.04
	Add 15% for contractor's profit and overheads	@	15%		₹	33.46
	Cost for one no.				₹	256.50
	Say				₹	256.50
18.56	Providing and fixing terminal guard:					
18.56.1	100 mm					
18.56.1.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18124	100 sand cast iron S&S terminal guard	each	1.00	₹ 210.00	₹	210.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.080	₹ 380.00	₹	30.40
0212	Helper	Day	0.080	₹ 300.00	₹	24.00
	TOTAL				₹	264.40
	Add for Carriage of all materials etc.	@	1.00%		₹	2.64
	TOTAL				₹	267.04
	Add for Sundries and contingencies	@	3%		₹	8.01

	TOTAL				₹	275.06
	Add 15% for contractor's profit and overheads	@	15%		₹	41.26
	Cost for one no.				₹	316.31
	Say				₹	316.30
18.56	Providing and fixing terminal guard:					
18.56.2	75 mm					
18.56.2.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18041	75 mm sand cast iron terminal guard	each	1.00	₹ 110.00	₹	110.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.080	₹ 380.00	₹	30.40
0212	Helper	Day	0.080	₹ 300.00	₹	24.00
	TOTAL				₹	164.40
	Add for Carriage of all materials etc.	@	1.00%		₹	1.64
	TOTAL				₹	166.04
	Add for Sundries and contingencies	@	3%		₹	4.98
	TOTAL				₹	171.03
	Add 15% for contractor's profit and overheads	@	15%		₹	25.65
	Cost for one no.				₹	196.68
	Say				₹	196.70
18.56	Providing and fixing terminal guard:					
18.56.2	75 mm					
18.56.2.2	Sand cast iron S&S as per IS - 3989					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18125	75 mm sand cast iron S&S terminal guard	each	1.00	₹ 200.00	₹	200.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.080	₹ 380.00	₹	30.40
0212	Helper	Day	0.080	₹ 300.00	₹	24.00
	TOTAL				₹	254.40
	Add for Carriage of all materials etc.	@	1.00%		₹	2.54
	TOTAL				₹	256.94
	Add for Sundries and contingencies	@	3%		₹	7.71
	TOTAL				₹	264.65
	Add 15% for contractor's profit and overheads	@	15%		₹	39.70
	Cost for one no.				₹	304.35
	Say				₹	304.40
18.57	Providing and fixing collar:					
18.57.1	100 mm					
18.57.1.1	Sand cast iron S&S as per IS - 1729					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	MATERIALS					
18058	100 mm sand cast iron collar	each	1.00	₹ 160.00	₹	160.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.050	₹ 380.00	₹	19.00
0212	Helper	Day	0.050	₹ 300.00	₹	15.00
	TOTAL				₹	194.00
	Add for Carriage of all materials & Ladder etc.	@	2.00%		₹	3.88
	TOTAL				₹	197.88
	Add for Sundries and contingencies	@	3%		₹	5.94
	TOTAL				₹	203.82
	Add 15% for contractor's profit and overheads	@	15%		₹	30.57
	Cost for one no.				₹	234.39

	Say				₹ 234.40
18.57	Providing and fixing collar:				
18.57.1	100 mm				
18.57.1.2	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS.				
18126	100 sand cast iron S&S collar	each	1.00	₹ 200.00	₹ 200.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 234.00
	Add for Carriage of all materials & Ladder etc.	@	2.00%		₹ 4.68
	TOTAL				₹ 238.68
	Add for Sundries and contingencies	@	3%		₹ 7.16
	TOTAL				₹ 245.84
	Add 15% for contractor's profit and overheads	@	15%		₹ 36.88
	Cost for one no.				₹ 282.72
	Say				₹ 282.70
18.57	Providing and fixing collar:				
18.57.2	75 mm				
18.57.2.1	Sand cast iron S&S as per IS - 1729				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18057	75 mm sand cast iron collar	each	1.00	₹ 120.00	₹ 120.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 154.00
	Add for Carriage of all materials & Ladder etc.	@	2.00%		₹ 3.08
	TOTAL				₹ 157.08
	Add for Sundries and contingencies	@	3%		₹ 4.71
	TOTAL				₹ 161.79
	Add 15% for contractor's profit and overheads	@	15%		₹ 24.27
	Cost for one no.				₹ 186.06
	Say				₹ 186.10
18.57	Providing and fixing collar:				
18.57.2	75 mm				
18.57.2.2	Sand cast iron S&S as per IS- 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18127	75 mm sand cast iron S&S collar	each	1.00	₹ 175.00	₹ 175.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 209.00
	Add for Carriage of all materials & Ladder etc.	@	2.00%		₹ 4.18
	TOTAL				₹ 213.18
	Add for Sundries and contingencies	@	3%		₹ 6.40
	TOTAL				₹ 219.58
	Add 15% for contractor's profit and overheads	@	15%		₹ 32.94
	Cost for one no.				₹ 252.51
	Say				₹ 252.50
18.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter:				
18.58.1	100mm				
Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for one joint				
	MATERIALS				
18017	Pig lead	kilogram	0.98	₹ 150.00	₹ 147.00
18064	Spun yarn	kilogram	0.11	₹ 45.00	₹ 4.95
	LABOUR				
0216	Foreman	Day	0.060	₹ 425.00	₹ 25.50
0215	Fitter (grade-1)	Day	0.075	₹ 380.00	₹ 28.50
0212	Helper	Day	0.075	₹ 300.00	₹ 22.50
	TOTAL				₹ 228.45
	Add for Carriage of all materials & cost of kerosene oil, fuel, ladder etc.	@	12.00%		₹ 27.41
	TOTAL				₹ 255.86
	Add for Sundries and contingencies	@	3%		₹ 7.68
	TOTAL				₹ 263.54
	Add 15% for contractor's profit and overheads	@	15%		₹ 39.53
	Cost for one no. joint				₹ 303.07
	Say				₹ 303.10
18.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter:				
18.58.2	75 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one joint				
	MATERIALS				
18017	Pig lead	kilogram	0.88	₹ 150.00	₹ 132.00
1881	Spun yarn	kilogram	0.09	₹ 45.00	₹ 4.05
	LABOUR				
0216	Foreman	Day	0.050	₹ 425.00	₹ 21.25
0215	Fitter (grade-1)	Day	0.0625	₹ 380.00	₹ 23.75
0212	Helper	Day	0.0625	₹ 300.00	₹ 18.75
	TOTAL				₹ 199.80
	Add for Carriage of all materials & cost of kerosene oil, fuel, ladder etc.	@	12.00%		₹ 23.98
	TOTAL				₹ 223.78
	Add for Sundries and contingencies	@	3%		₹ 6.71
	TOTAL				₹ 230.49
	Add 15% for contractor's profit and overheads	@	15%		₹ 34.57
	Cost for one no. joint				₹ 265.06
	Say				₹ 265.10
18.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter:				
18.58.3	50 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one joint				
	MATERIALS				
18017	Pig lead	kilogram	0.77	₹ 150.00	₹ 115.50
1881	Spun yarn	kilogram	0.06	₹ 45.00	₹ 2.70
	LABOUR				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0215	Fitter (grade-1)	Day	0.05	₹ 380.00	₹ 19.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 173.45
	Add for Carriage of all materials & cost of kerosene oil, fuel, ladder etc.	@	12.50%		₹ 21.68
	TOTAL				₹ 195.13
	Add for Sundries and contingencies	@	3%		₹ 5.85
	TOTAL				₹ 200.99
	Add 15% for contractor's profit and overheads	@	15%		₹ 30.15
	Cost for one no. joint				₹ 231.13
	Say				₹ 231.10
18.59	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter :				
18.59.1	100 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				

	MATERIALS				
18003	M.S. stayes & clamps including bolts and nuts for 100 mm pipe	each	1.00	₹ 40.00	₹ 40.00
	LABOUR				
0216	Fitter (grade-1)	Day	0.04	₹ 380.00	₹ 15.20
0212	Helper	Day	0.04	₹ 300.00	₹ 12.00
	TOTAL				₹ 67.20
	Add for Carriage of all materials & fixing stay in concrete at bottom, tripod & ladder etc.	@	15.00%		₹ 10.08
	TOTAL				₹ 77.28
	Add for Sundries and contingencies	@	3%		₹ 2.32
	TOTAL				₹ 79.60
	Add 15% for contractor's profit and overheads	@	15%		₹ 11.94
	Cost for one no.				₹ 91.54
	Say				₹ 91.50
18.59	Providing and fixing M.S. stays and clamps for sand castiron/centrifugally cast (spun) iron pipes of diameter :				
18.59.2	75 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18007	M.S. stayes & clamps including bolts and nuts for 75 mm pipe	each	1.00	₹ 38.00	₹ 38.00
	LABOUR				
0216	Fitter (grade-1)	Day	0.03	₹ 380.00	₹ 11.40
0212	Helper	Day	0.03	₹ 300.00	₹ 9.00
	TOTAL				₹ 58.40
	Add for Carriage of all materials & fixing stay in concrete at bottom, tripod & ladder etc.	@	13.00%		₹ 7.59
	TOTAL				₹ 65.99
	Add for Sundries and contingencies	@	3%		₹ 1.98
	TOTAL				₹ 67.97
	Add 15% for contractor's profit and overheads	@	15%		₹ 10.20
	Cost for one no.				₹ 78.17
	Say				₹ 78.20
18.59	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter :				
18.59.3	50 mm				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18006	M.S. stayes & clamps including bolts and nuts for 50 mm pipe	each	1.00	₹ 35.00	₹ 35.00
	LABOUR				
0216	Fitter (grade-1)	Day	0.025	₹ 380.00	₹ 9.50
0212	Helper	Day	0.025	₹ 300.00	₹ 7.50
	TOTAL				₹ 52.00
	Add for Carriage of all materials & fixing stay in concrete at bottom, tripod & ladder etc.	@	12.00%		₹ 6.24
	TOTAL				₹ 58.24
	Add for Sundries and contingencies	@	3%		₹ 1.75
	TOTAL				₹ 59.99
	Add 15% for contractor's profit and overheads	@	15%		₹ 9.00
	Cost for one no.				₹ 68.99
	Say				₹ 69.00
18.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors:				
18.60.1	100 mm inlet and 100 mm outlet				

18.60.1.1	Sand cast iron S&S as per IS: 3989.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18183	Sand cast iron S&S trap 100 mm inlet and 100 mm outlet	each	1.00	₹ 420.00	₹ 420.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 666.50
	Add for Carriage of all materials and cost of cement ,sand & grit etc.	@	5.00%		₹ 33.33
	TOTAL				₹ 699.83
	Add for Sundries and contingencies	@	3%		₹ 20.99
	TOTAL				₹ 720.82
	Add 15% for contractor's profit and overheads	@	15%		₹ 108.12
	Cost for one no.				₹ 828.94
	Say				₹ 828.90
18.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors:				
18.60.1	100 mm inlet and 100 mm outlet				
18.60.1.1	Sand Cast Iron S&S as per IS: 1729.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18071	Sand cast iron trap with 100 mm inlet and 100 mm outlet	each	1.00	₹ 290.00	₹ 290.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 536.50
	Add for Carriage of all materials and cost of cement ,sand & grit etc.	@	5.00%		₹ 26.83
	TOTAL				₹ 563.33
	Add for Sundries and contingencies	@	3%		₹ 16.90
	TOTAL				₹ 580.22
	Add 15% for contractor's profit and overheads	@	15%		₹ 87.03
	Cost for one no.				₹ 667.26
	Say				₹ 667.30
18.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors:				
18.60.2	100 mm inlet and 75 mm outlet				
18.60.2.1	Sand cast iron S&S as per IS - 3989				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18184	Sand cast iron S&S trap 100 mm inlet and 75 mm outlet	each	1.00	₹ 450.00	₹ 450.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 696.50
	Add for Carriage of all materials and cost of cement ,sand & grit etc.	@	5.50%		₹ 38.31
	TOTAL				₹ 734.81
	Add for Sundries and contingencies	@	3%		₹ 22.04
	TOTAL				₹ 756.85
	Add 15% for contractor's profit and overheads	@	15%		₹ 113.53
	Cost for one no.				₹ 870.38

	Say				₹ 870.40
18.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors:				
18.60.2	100 mm inlet and 75 mm outlet				
18.60.2.2	Sand Cast Iron S&S as per IS- 1729.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18072	Sand cast iron trap with 100 mm inlet and 75	each	1.00	₹ 210.00	₹ 210.00
	mm outlet				
	LABOUR				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 456.50
	Add for Carriage of all materials and cost of cement ,sand & grit etc.	@	5.50%		₹ 25.11
	TOTAL				₹ 481.61
	Add for Sundries and contingencies	@	3%		₹ 14.45
	TOTAL				₹ 496.06
	Add 15% for contractor's profit and overheads	@	15%		₹ 74.41
	Cost for one no.				₹ 570.46
	Say				₹ 570.50
18.61	Cutting chases in brick masonry walls for following diameter sand cast iron/centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size) including necessary plaster and pointing in cement mortar 1:4(1cement: 4 coarse sand):				
18.61.1	100mmdia.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one metre (Chase for 100 mm dia 10.00 mtr length pipe)				
	10.00 x 0.15 X 0.15=0.225 Cum (less pipe)				
	MATERIALS				
04007	12.50 mm stone aggregate	cum	0.126	₹ 4,005.00	₹ 504.63
02003	Fine Sand	cum	0.063	₹ 370.00	₹ 23.31
03001	Cement	t	0.0286	₹ 6,100.00	₹ 174.46
02003	Sand for plaster	cum	0.023	₹ 370.00	₹ 8.51
03001	Cement for plaster 1:4	t	0.00082	₹ 6,100.00	₹ 5.00
	CARRIAGE				
405	Stone Aggregate	cum	0.126	₹ 159.75	₹ 20.13
425	Fine Sand	cum	0.086	₹ 142.63	₹ 12.27
421	Cement	tonne	0.0368	₹ 110.94	₹ 4.08
	LABOUR				
	For cutting chases				
0203	Beldar (M)	Day	1.2	₹ 300.00	₹ 360.00
	For Concreting & plastering				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0117	Mason 1st class	Day	1.00	₹ 425.00	₹ 425.00
0210	Carpenter 2nd class	Day	0.10	₹ 380.00	₹ 38.00
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
0203	Belder	Day	1.50	₹ 300.00	₹ 450.00
0212	Coolie	Day	0.75	₹ 300.00	₹ 225.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 2,449.14
	Add for planks for closing the side, Ballies, Nails, pumps for water & carriage of all materials etc.	@	10.00%		₹ 244.91
	TOTAL				₹ 2,694.05
	Add for Chisel for cutting chases and pointing wherever required	@	3.50%		₹ 94.29
	TOTAL				₹ 2,788.35
	Add for Scaffolding/Ladders for concreting & plastering	@	3.0%		₹ 83.65
	TOTAL				₹ 2,872.00
	Add for Sundries and contingencies	@	3.0%		₹ 86.16

	TOTAL				₹	2,958.16
	Add for Water charges & Electricity	@	1.5%		₹	44.37
					₹	3,002.53
	Add 15% for contractor's profit and overheads	@	15%		₹	450.38
	Cost for cutting chases in brick wall and closing for 10.00 mtr length				₹	3,452.91
	Rate per mtr.				₹	345.29
	Say				₹	345.30
18.61	Cutting chases in brick masonry walls for following diameter sand cast iron/centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 12.5 mm nominal size) including necessary plaster and pointing in cement mortar 1:4(1cement: 4 coarse sand):					
18.61.2	75 mmdia.					
Code	Description	Unit	Quantity	Rate	Amount	
Details of cost for one metre (Chase for 75 mm dia 10.00 mtr length pipe)						
	10.00 x 0.125 X 0.125=0.156 Cum (less pipe)					
	MATERIALS					
04007	12.50 mm stone aggregate	cum	0.096	₹ 4,005.00	₹	384.48
02003	Fine Sand	cum	0.048	₹ 370.00	₹	17.76
03001	Cement	t	0.0218	₹ 6,100.00	₹	132.98
02003	Sand for plaster	cum	0.020	₹ 370.00	₹	7.40
03001	Cement for plaster 1:4	t	0.00068	₹ 6,100.00	₹	4.15
	CARRIAGE					
405	Stone Aggregate	cum	0.096	₹ 159.75	₹	15.34
425	Fine Sand	cum	0.068	₹ 142.63	₹	9.70
421	Cement	tonne	0.0286	₹ 110.94	₹	3.17
	LABOUR					
	For cutting chases					
0203	Beldar (M)	Day	1.00	₹ 300.00	₹	300.00
	For Concreting & plastering					
0216	Foreman	Day	0.10	₹ 425.00	₹	42.50
0117	Mason 1st class	Day	0.60	₹ 425.00	₹	255.00
0210	Carpenter 2nd class	Day	0.10	₹ 380.00	₹	38.00
0212	Helper	Day	0.10	₹ 300.00	₹	30.00
0203	Belder	Day	1.25	₹ 300.00	₹	375.00
0212	Coolie	Day	0.65	₹ 300.00	₹	195.00
0205	Waterman	Day	0.15	₹ 300.00	₹	45.00
	TOTAL				₹	1,855.48
	Add for planks for closing the side, Ballies, Nails, pumps for water & carriage of all materials etc.	@	9.00%		₹	166.99
	TOTAL				₹	2,022.47
	Add for Chisel for cutting chases and pointing wherever required	@	5.00%		₹	101.12
	TOTAL				₹	2,123.59
	Add for Scaffolding/Ladders for concreting & plastering	@	3.0%		₹	63.71
	TOTAL				₹	2,187.30
	Add for Sundries and contingencies	@	3.0%		₹	65.62
	TOTAL				₹	2,252.92
	Add for Water charges & Electricity	@	1.5%		₹	33.79
					₹	2,286.71
	Add 15% for contractor's profit and overheads	@	15%		₹	343.01
	Cost for cutting chases in brick wall and closing for 10.00 mtr length				₹	2,629.72
	Rate per mtr.				₹	262.97
	Say				₹	263.00
18.61	Cutting chases in brick masonry walls for following diameter sand cast iron/centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 12.5 mm nominal size) including necessary plaster and pointing in cement mortar 1:4(1cement: 4 coarse sand):					
18.61.3	50mmdia.					
Code	Description	Unit	Quantity	Rate	Amount	

Details of cost for one metre (Chase for 50 mm dia 10.00 mtr length pipe)					
	10.00 x 0.09 X 0.09=0.081 Cum (less pipe)				
	MATERIALS				
04007	12.50 mm stone aggregate	cum	0.051	₹ 4,005.00	₹ 204.26
02003	Fine Sand	cum	0.026	₹ 370.00	₹ 9.44
03001	Cement	t	0.0116	₹ 6,100.00	₹ 70.76
02003	Sand for plaster	cum	0.014	₹ 370.00	₹ 5.18
03001	Cement for plaster 1:4	t	0.00050	₹ 6,100.00	₹ 3.05
	CARRIAGE				
405	Stone Aggregate	cum	0.0510	₹ 159.75	₹ 8.15
425	Fine Sand	cum	0.0395	₹ 142.63	₹ 5.63
421	Cement	tonne	0.0166	₹ 110.94	₹ 1.84
	LABOUR				
	For cutting chases				
0203	Beldar (M)	Day	0.50	₹ 300.00	₹ 150.00
	For Concreting & plastering				
0216	Foreman	Day	0.08	₹ 425.00	₹ 31.88
0117	Mason 1st class	Day	0.50	₹ 425.00	₹ 212.50
0210	Carpenter 2nd class	Day	0.10	₹ 380.00	₹ 38.00
0212	Helper	Day	0.10	₹ 300.00	₹ 30.00
0203	Belder	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 1,205.68
	Add for planks for closing the side, Ballies, Nails, pumps for water & carriage of all materials etc.	@	15.00%		₹ 180.85
	TOTAL				₹ 1,386.53
	Add for Chisel for cutting chases and pointing wherever required	@	5.00%		₹ 69.33
	TOTAL				₹ 1,455.86
	Add for Scaffolding/Ladders for concreting & plastering	@	3.0%		₹ 43.68
	TOTAL				₹ 1,499.53
	Add for Sundries and contingencies	@	3.0%		₹ 44.99
	TOTAL				₹ 1,544.52
	Add for Water charges & Electricity	@	1.5%		₹ 23.17
					₹ 1,567.69
	Add 15% for contractor's profit and overheads	@	15%		₹ 235.15
	Cost for cutting chases in brick wall and closing for 10.00 mtr length				₹ 1,802.84
	Rate per mtr.				₹ 180.28
	Say				₹ 180.30
18.62	Painting C.I. cistern with bitumastic or any other anti-corrosive paint inside and white paint over a coat of zinc chromate yellow primer (of approved quality) on the outside surface of the cistern flush pipe, other fittings, etc. complete for new work.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one cistern with fittings				
	MATERIALS				
12008	Anticorrosive bitumastic paint (of approved quality)	litre	0.23	₹ 115.00	₹ 26.45
18131	Red oxide Zinc chromate yellow primer	litre	0.20	₹ 85.00	₹ 17.00
12040	Synthetic enamel paint	litre	0.40	₹ 155.00	₹ 62.00
	LABOUR				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0227	Painter	Day	0.27	₹ 340.00	₹ 91.80
0212	Helper	Day	0.27	₹ 300.00	₹ 81.00
	TOTAL				₹ 320.75
	Add for Carriage of all materials and cost sand paper & cloth etc.	@	5.00%		₹ 16.04
	TOTAL				₹ 336.79
	Add for Sundries and contingencies	@	3%		₹ 10.10
	TOTAL				₹ 346.89
	Add 15% for contractor's profit and overheads	@	15%		₹ 52.03
	Cost for one no.				₹ 398.92
	Say				₹ 398.90

18.63	Re-painting C.I. cistern with bitumastic or any other anti-corrosive paint inside and white paint on the outside surface of the cistern, flush pipe, other fittings, etc. complete including polishing of wooden seat and lid and cleaning of W.C. pan with acid wherever necessary.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one cistern with fittings				
	MATERIALS				
12008	Anticorrosive bitumastic paint (of approved quality)	litre	0.23	₹ 115.00	₹ 26.45
12040	Synthetic enamel paint	litre	0.20	₹ 155.00	₹ 31.00
	LABOUR				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0227	Painter	Day	0.25	₹ 340.00	₹ 85.00
0212	Helper	Day	0.25	₹ 300.00	₹ 75.00
	TOTAL				₹ 259.95
	Add for cost of sand paper & cloth etc.	@	4.00%		₹ 10.40
	TOTAL				₹ 270.35
	Add for polishing wooden seat etc.	@	10.00%		₹ 27.03
	TOTAL				₹ 297.38
	Add for cleaning pan with acid & Carriage of all materials etc.	@	5.00%		₹ 14.87
	TOTAL				₹ 312.25
	Add for Sundries and contingencies	@	3%		₹ 9.37
	TOTAL				₹ 321.62
	Add 15% for contractor's profit and overheads	@	15%		₹ 48.24
	Cost for repainting per cistren				₹ 369.86
	Say				₹ 369.90
18.64	Repainting C.I. cistern with synthetic enamel paint of approved colour brand and manufacture on the outside surface of cistern flush pipe, other fittings etc. complete.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one cistern with fittings				
	MATERIALS				
12040	Synthetic enamel paint	litre	0.20	₹ 155.00	₹ 31.00
	LABOUR				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0227	Painter	Day	0.15	₹ 340.00	₹ 51.00
0212	Helper	Day	0.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 161.00
	Add for Carriage of all materials and cost sand paper & cloth etc.	@	5.00%		₹ 8.05
	TOTAL				₹ 169.05
	Add for Sundries and contingencies	@	3%		₹ 5.07
	TOTAL				₹ 174.12
	Add 15% for contractor's profit and overheads	@	15%		₹ 26.12
	Cost for one no.				₹ 200.24
	Say				₹ 200.20
18.65	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :				
18.65.1	100 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Exterior area of pipe for 30.00 mtr. Length				
	(i) 100 mm dia= 10.03 Sqm				
	MATERIALS				
18131	Zinc chromite yellow primer	Ltr	0.54	₹ 85.00	₹ 45.90
12041	Two coats of painting with specified colour	Ltr	0.95	₹ 185.00	₹ 175.75
	LABOUR				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0227	Painter	Day	0.65	₹ 340.00	₹ 221.00

0212	Helper	Day	0.65	₹ 300.00	₹ 195.00
	TOTAL				₹ 701.40
	Add for extra painting on fitting	@	12.00%		₹ 84.17
	TOTAL				₹ 785.57
	Add for scaffolding & Ladder etc.	@	7.50%		₹ 58.92
	TOTAL				₹ 844.49
	Add for carriage of all materials and cost of wire brushes for cleaning, putty, sand paper, brushes, old cloth etc.	@	15.00%		₹ 126.67
	TOTAL				₹ 971.16
	Add for Sundries and contingencies	@	3%		₹ 29.13
	TOTAL				₹ 1,000.29
	Add 15% for contractor's profit and overheads	@	15%		₹ 150.04
	Cost for painting 100 mm dia pipe for 30.00 mtr length				₹ 1,150.34
	Rate per mtr.				₹ 38.34
	Say				₹ 38.30
18.65	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :				
18.65.2	75 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Exterior area of pipe for 30.00 mtr. Length				
	(i) 75 mm dia= 7.67 Sqm				
	MATERIALS				
18131	Zinc chromite yellow primer	Ltr	0.41	₹ 85.00	₹ 34.85
12041	Two coats of painting with specified colour	Ltr	0.73	₹ 185.00	₹ 135.05
	LABOUR				
0216	Foreman	Day	0.12	₹ 425.00	₹ 51.00
0227	Painter	Day	0.48	₹ 340.00	₹ 163.20
0212	Helper	Day	0.48	₹ 300.00	₹ 144.00
	TOTAL				₹ 528.10
	Add for extra painting on fittings etc.	@	10.00%		₹ 52.81
	TOTAL				₹ 580.91
	Add for scaffolding & Ladder etc.	@	6.00%		₹ 34.85
	TOTAL				₹ 615.76
	Add for carriage of all materials and cost of wire brushes for cleaning, putty, sand paper, brushes, old cloth etc.	@	12.00%		₹ 73.89
	TOTAL				₹ 689.66
	Add for Sundries and contingencies	@	3%		₹ 20.69
	TOTAL				₹ 710.35
	Add 15% for contractor's profit and overheads	@	15%		₹ 106.55
	Cost for painting 75 mm dia pipe for 30.00 mtr length				₹ 816.90
	Rate per mtr.				₹ 27.23
	Say				₹ 27.20
18.66	Repainting sand cast iron/ centrifugally cast iron (spun) iron, soil, waste, vent pipes and fittings with paint of any colour such as chocolate, grey or buff etc :				
18.66.1	100 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Exterior area of pipe for 30.00 mtr. Length				
	100 mm dia= 10.03 Sqm				
	MATERIALS				
12041	One or more coats of painting with specified colour	Ltr	0.46	₹ 185.00	₹ 85.10
	LABOUR				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0227	Painter	Day	0.30	₹ 340.00	₹ 102.00
0212	Helper	Day	0.30	₹ 300.00	₹ 90.00
	TOTAL				₹ 319.60
	Add for extra painting on fittings etc.	@	15.00%		₹ 47.94
	TOTAL				₹ 367.54
	Add for scaffolding & Ladder etc.	@	10.00%		₹ 36.75
	TOTAL				₹ 404.29

	Add for carriage of all materials and cost of wire brushes for cleaning, putty, sand paper, brushes, old cloth etc.	@	20.00%		₹ 80.86
	TOTAL				₹ 485.15
	Add for Sundries and contingencies	@	3%		₹ 14.55
	TOTAL				₹ 499.71
	Add 15% for contractor's profit and overheads	@	15%		₹ 74.96
	Cost for painting 100 mm dia old pipe for 30.00 mtr length				₹ 574.66
	Rate per mtr.				₹ 19.16
	Say				₹ 19.20
18.66	Repainting sand cast iron/ centrifugally cast iron (spun) iron, soil, waste, vent pipes and fittings with paint of any colour such as chocolate, grey or buff etc :				
18.66.2	75 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Exterior area of pipe for 30.00 mtr. Length				
	75 mm dia= 7.67 Sqm				
	MATERIALS				
12041	One or more coats of painting with specified colour	Ltr	0.35	₹ 185.00	₹ 64.75
	LABOUR				
0216	Foreman	Day	0.08	₹ 425.00	₹ 34.00
0227	Painter	Day	0.22	₹ 340.00	₹ 74.80
0212	Helper	Day	0.22	₹ 300.00	₹ 66.00
	TOTAL				₹ 239.55
	Add for extra painting on fittings etc.	@	12.00%		₹ 28.75
	TOTAL				₹ 268.30
	Add for scaffolding & Ladder etc.	@	10.00%		₹ 26.83
	TOTAL				₹ 295.13
	Add for carriage of all materials and cost of wire brushes for cleaning, putty, sand paper, brushes, old cloth etc.	@	15.00%		₹ 44.27
	TOTAL				₹ 339.39
	Add for Sundries and contingencies	@	3%		₹ 10.18
	TOTAL				₹ 349.58
	Add 15% for contractor's profit and overheads	@	15%		₹ 52.44
	Cost for painting 75 mm dia old pipe for 30.00 mtr length				₹ 402.01
	Rate per mtr.				₹ 13.40
	Say				₹ 13.40
18.67	Repainting bath tub of size 1700x730x430mm with enamel paint.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one tub for 3.33 sqm. [Bottom: 1x1.70x 0.73=1.241 sqm. Sides: 2x1.70x0.43= 1.462 sqm + Ends: 2x0.73x0.43=0.627 sqm]= Total=3.33 sqm				
	MATERIALS				
12041	Paint of approved quality	litre	0.25	₹ 185.00	₹ 46.25
	LABOUR				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0227	Painter	Day	0.40	₹ 340.00	₹ 136.00
0212	Coolies	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 344.75
	Add for carriage of all materials and cost of wire brushes, sand paper, brushes, putty etc.	@	18.00%		₹ 62.06
	TOTAL				₹ 406.81
	Add for Sundries and contingencies	@	3%		₹ 12.20
	TOTAL				₹ 419.01
	Add 15% for contractor's profit and overheads	@	15%		₹ 62.85
	Cost for one no.				₹ 481.86
	Say				₹ 481.90
18.68	Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo Indian W.C pan) with seat lid with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40mm flush bend 20mm over flow pipe with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				

18.68.1	White vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and C.P. flush bend.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	MATERIALS				
18062	White plastic seat and lid with C.P. brass	each	1.00	₹ 340.00	₹ 340.00
	hinges and rubber buffers etc.				
18083	White vitreous china dual purpose closet	each	1.00	₹ 1,400.00	₹ 1,400.00
	(anglo India W.C. pan)				
18134	10 litre white vitreous china low level flushing	each	1.00	₹ 1,300.00	₹ 1,300.00
	cistern with fittings and brackets and 40 mm				
	porcelain enamelled flush bend				
18009	Mosquito proof coupling of approved	each	1.00	₹ 35.00	₹ 35.00
	municipal design				
	LABOUR				
0215	Fitter (grade-1)	Day	1.10	₹ 380.00	₹ 418.00
0218	Mason (average)	Day	1.00	₹ 400.00	₹ 400.00
0212	Helper	Day	1.20	₹ 300.00	₹ 360.00
	TOTAL				₹ 4,253.00
	Add Carriage for all materials & cost of Plugs and screws, Read lead, white lead and Gaskin, cement, sand and grit for repairs including cutting and making good the walls and floors where required and fixing , overflow arrangements & specials, painting of fitting/brackets etc.	@	12%		₹ 510.36
	TOTAL				₹ 4,763.36
	Add for Sundries and contingencies	@	3%		₹ 142.90
	TOTAL				₹ 4,906.26
	Add 1% for water charges	@	1%		₹ 49.06
	TOTAL				₹ 4,955.32
	Add 15% for contractor's profit and overheads	@	15%		₹ 743.30
	Cost for 1 No.				₹ 5,698.62
	Say				₹ 5,698.60
18.69	Providing and fixing PTMT Waste Coupling for washbasin and sink, of approved quality and colour.				
18.69.1	Waste coupling 3.1 mm of 79mm length and 62mm breadth weighing not less than 45 gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :				
18170	P.T.M.T. waste coupling 31/32 mm	Each	1.00	₹ 60.00	₹ 60.00
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75
0215	Fitter grade-1	Day	0.03	₹ 380.00	₹ 11.40
0212	Helper	Day	0.03	₹ 300.00	₹ 9.00
	TOTAL				₹ 93.15
	Add for Sundries and contingencies	@	3%		₹ 2.79
	TOTAL				₹ 95.94
	Add 15% for contractor's profit and overheads	@	15%		₹ 14.39
	Cost for one no.				₹ 110.34
	Say				₹ 110.30
18.69	Providing and fixing PTMT Waste Coupling for washbasin and sink, of approved quality and colour.				
18.69.2	Waste coupling 38mm of 83mm length and 77mm breadth, weighing not less than 60gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :				
18171	P.T.M.T. waste coupling 38/40 mm	Each	1.00	₹ 85.00	₹ 85.00
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75

0215	Fitter grade-1	Day	0.03	₹ 380.00	₹ 11.40
0212	Helper	Day	0.03	₹ 300.00	₹ 9.00
	TOTAL				₹ 118.15
	Add for Sundries and contingencies	@	3%		₹ 3.54
	TOTAL				₹ 121.69
	Add 15% for contractor's profit and overheads	@	15%		₹ 18.25
	Cost for one no.				₹ 139.95
	Say				₹ 139.90
18.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				
18.70.1	Bottle trap 31mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
18172	P.T.M.T. bottle trap 31/32 mm	Each	1.00	₹ 350.00	₹ 350.00
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75
0215	Fitter grade-1	Day	0.030	₹ 380.00	₹ 11.40
0212	Helper	Day	0.030	₹ 300.00	₹ 9.00
	TOTAL				₹ 383.15
	Add for Sundries and contingencies	@	3%		₹ 11.49
	TOTAL				₹ 394.64
	Add 15% for contractor's profit and overheads	@	15%		₹ 59.20
	Cost for one no.				₹ 453.84
	Say				₹ 453.80
18.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				
18.70.2	Bottle trap 38mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 263gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :				
18173	P.T.M.T. bottle trap 38/40 mm	Each	1.00	₹ 370.00	₹ 370.00
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75
0215	Fitter grade-1	Day	0.030	₹ 380.00	₹ 11.40
0212	Helper	Day	0.030	₹ 300.00	₹ 9.00
	TOTAL				₹ 403.15
	Add for Sundries and contingencies	@	3%		₹ 12.09
	TOTAL				₹ 415.24
	Add 15% for contractor's profit and overheads	@	15%		₹ 62.29
	Cost for one no.				₹ 477.53
	Say				₹ 477.50
18.71	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colours weighing not less than 105 gms				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :				
18174	P.T.M.T. liquid shop container	Each	1.00	₹ 135.00	₹ 135.00
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75
0215	Fitter grade-1	Day	0.030	₹ 380.00	₹ 11.40
	TOTAL				₹ 159.15
	Add for Sundries and contingencies	@	3%		₹ 4.77
	TOTAL				₹ 163.92

	Add 15% for contractor's profit and overheads	@	15%		₹ 24.59
	Cost for one no.				₹ 188.51
	Say				₹ 188.50
18.72	Providing and fixing PTMT towel ring trapezoidal shape 215mm long, 200mm wide with a minimum distances of 37mm from wall face with concealed fittings arrangement of approved quality and colours weighing not less than 80 gms				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
18175	P.T.M.T. towel ring	Each	1.00	₹ 108.00	₹ 108.00
	LABOUR				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0215	Fitter grade-1	Day	0.080	₹ 380.00	₹ 30.40
0212	Helper	Day	0.080	₹ 300.00	₹ 24.00
	TOTAL				₹ 183.65
	Add for Sundries and contingencies	@	3%		₹ 5.51
	TOTAL				₹ 189.16
	Add 15% for contractor's profit and overheads	@	15%		₹ 28.37
	Cost for one no.				₹ 217.53
	Say				₹ 217.50
18.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.				
18.73.1	450mm long towel rail with total length of 495mm, 78mm wide and effective height of 88mm, weighing not less than 170gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :				
18176	P.T.M.T. towel rail 18" (450mm) with brackets	Each	1.00	₹ 240.00	₹ 240.00
A	Wooden plugs				
	Rate as per item no 8.30 of SH : Wood work (A)	each	2.00	₹ 12.94	₹ 25.88
08055	25 mm CP. brass screws	100 Nos	6.00	₹ 130.00	₹ 7.80
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75
0215	Fitter grade-1	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 320.43
	Add for Carriage of materials (except A)	@	5%		₹ 14.73
	TOTAL				₹ 369.16
	Add for Sundries and contingencies (except A)	@	3%		₹ 10.30
	TOTAL				₹ 394.18
	Add 15% for contractor's profit and overheads (except A)	@	15%		₹ 55.25
	Cost for one no.				₹ 449.43
	Say				₹ 449.40
18.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.				
18.73.2	600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
18177	P.T.M.T. towel rail 24" (600mm)	Each	1.00	₹ 285.00	₹ 285.00
	Wooden plugs				
	Rate as per item no 8.30 of SH : Wood work (A)	each	2.00	₹ 12.94	₹ 25.88
08055	25 mm CP. brass screws	100 Nos	6.00	₹ 130.00	₹ 7.80
	LABOUR				
0216	Foreman	Day	0.03	₹ 425.00	₹ 12.75

0215	Fitter grade-1	Day	0.050	₹ 380.00	₹ 19.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 365.43
	Add for Carriage of materials (except A)	@	5%		₹ 16.98
	TOTAL				₹ 416.41
	Add for Sundries and contingencies (except A)	@	3%		₹ 11.72
	TOTAL				₹ 445.10
	Add 15% for contractor's profit and overheads (except A)	@	15%		₹ 62.88
	Cost for one no.				₹ 507.98
	Say				₹ 508.00
18.74	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour, weighing not less than 300gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
18178	P.T.M.T. shelf	Each	1.00	₹ 300.00	₹ 300.00
08055	25 mm CP. brass screws	100 Nos	6.00	₹ 130.00	₹ 7.80
	LABOUR				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0215	Fitter grade-1	Day	0.100	₹ 380.00	₹ 38.00
0212	Helper	Day	0.100	₹ 300.00	₹ 30.00
	TOTAL				₹ 397.05
	Add for Carriage of materials & cost of cleats	@	5%		₹ 19.85
	TOTAL				₹ 416.90
	Add for Sundries and contingencies	@	3%		₹ 12.51
	TOTAL				₹ 429.41
	Add for Electricity	@	0.5%		₹ 12.88
	TOTAL				₹ 442.29
	Add 15% for contractor's profit and overheads	@	15%		₹ 66.34
	Cost for one no.				₹ 508.64
	Say				₹ 508.60
18.75	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes, weighing not less than 60gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
18179	P.T.M.T. Urinal spreader 15 mm	Each	1.00	₹ 155.00	₹ 155.00
	LABOUR				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25
0215	Fitter grade-1	Day	0.100	₹ 380.00	₹ 38.00
0212	Helper	Day	0.100	₹ 300.00	₹ 30.00
	TOTAL				₹ 244.25
	Add for Sundries and contingencies	@	3%		₹ 7.33
	TOTAL				₹ 251.58
	Add 15% for contractor's profit and overheads	@	15%		₹ 37.74
	Cost for one no.				₹ 289.31
	Say				₹ 289.30
18.76	Providing and fixing PTMT urinal cock of approved quality and colour.				
18.76.1	15 mm nominal bore, 80mm long. 42 mm high and 30mm wide with BSP female threads weighing not less than 48gms				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 No.				
	Materials:				
18185	P.T.M.T. Urinal cock 15mm dia	each	1.00	₹ 90.00	₹ 90.00
	LABOUR				
0216	Foreman	Day	0.05	₹ 425.00	₹ 21.25

0215	Fitter grade-1	Day	0.050	₹ 380.00	₹ 19.00
	TOTAL				₹ 130.25
	Add for Sundries and contingencies	@	3%		₹ 3.91
	TOTAL				₹ 134.16
	Add 15% for contractor's profit and overheads	@	15%		₹ 20.12
	Cost for one no.				₹ 154.28
	Say				₹ 154.30
18.77	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron/ cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5mm flat of specified shape, projecting 75mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners including drilling necessary holes in brick wall/ CC/ RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30mm x1.6mm galvanised M.S. flats of specified shape and of total length 420mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6mm, one bolts on each side of the pipe.				
18.77.1	Total bracket length 580mm of approved shape and design (for single 100mm dia pipes)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos.M.S holder bat clamp				
	MATERIALS:				
	(a) Quantity of M.S. Flats and galvanised M.s flats for single pipe				
	(i) 50x5 mm M.S. flats				
	10x0.58 = 5.80 m				
	Add wastage = 0.60 m				
	Total = 6.40 m				
	i.e. 6.40 x 1.97 kg/m = 12.61 kg or 0.126 q				
	(ii) 30x1.6 mm Galvanised M.S. flats				
	10x0.42 = 4.20 m				
	Add wastage = 0.20 m				
	Total = 4.40 m				
	i.e. 4.40 x 0.38 kg/m = 1.67 kg or 0.017 q				
	MATERIALS:				
05026	50x5 mm M.S. flats	q	0.126	₹ 3,992.00	₹ 502.99
05026	30x1.6 mm Galvanised M.S. flats	q	0.017	₹ 3,992.00	₹ 67.86
18169	Expansion hold fastners 6 mm dia with bolts	Nos	40.00	₹ 15.00	₹ 600.00
	10x4=40 Nos				
05017	25x6 mm bolts (for single pipe 10x2=20 Nos.)	q	0.015	₹ 6,749.00	₹ 101.24
	Fabrication including applying priming coat to bat clamps in a reputed workshop (Rate is confirmed from local workshop)	Nos	10	₹ 17.00	₹ 170.00
	CARRIAGE:				
0468	M.S. Flats	t	0.0143	₹ 110.94	₹ 1.59
	LABOUR:				
0216	Foreman	Day	.1	₹ 425.00	₹ 42.50
0215	Fitter grade-1	Day	.15	₹ 380.00	₹ 57.00
0212	Helper	Day	.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 1,588.18
	Add for hire charges of Drill machine, drill bits etc.	@	1.5%		₹ 23.82
	TOTAL				₹ 1,612.00
	Add for Sundries and contingencies	@	3%		₹ 48.36
	TOTAL				₹ 1,660.36
	Add for Electricity	@	0.5%		₹ 8.30
	TOTAL				₹ 1,668.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 250.30
	Cost for 10 (ten) nos bat clamps				₹ 1,918.96
	Cost for one no.				₹ 191.90
	Say				₹ 191.90

18.77	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron/ cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5mm flat of specified shape, projecting 75mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners including drilling necessary holes in brick wall/ CC/ RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30mm x1.6mm galvanised M.S. flats of specified shape and of total length 420mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6mm, one bolts on each side of the pipe.				
18.77.2	Total bracket length 810 mm of approved shape and design (for two 100mm dia pipes)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos.M.S holder bat clamp				
	MATERIALS:				
	(a) Quantity of M.S. Flats and galvanised M.s flats for two pipe				
	(i) 50x5 mm M.S. flats				
	10x0.810 = 8.10 m				
	Add wastage = 0.40 m				
	Total = 8.50 m				
	i.e. 8.50 x 1.97 kg/m = 16.75 kg or 0.167 q				
	(ii) 30x1.6 mm Galvanised M.S. flats				
	10x 2x 0.42 = 8.40 m				
	Add wastage = 0.40 m				
	Total = 8.80 m				
	i.e. 8.80 x 0.38 kg/m = 3.344 kg or 0.033 q				
	MATERIALS:				
05026	50x5 mm M.S. flats	q	0.167	₹ 3,992.00	₹ 666.66
05026	30x1.6 mm Galvanised M.S. flats	q	0.033	₹ 3,992.00	₹ 131.74
18169	Expansion hold fastners 6 mm dia with bolts	Nos	40.00	₹ 15.00	₹ 600.00
	10x4=40 Nos				
05017	25x6 mm bolts (for single pipe 10x2x2= 40 Nos.)	q	0.030	₹ 6,749.00	₹ 202.47
	Fabrication including applying priming coat to bat clamps in a reputed workshop (Rate is confirmed from local workshop)	Nos	10	₹ 22.00	₹ 220.00
	CARRIAGE:				
0468	M.S. Flats	t	0.02	₹ 110.94	₹ 2.22
	LABOUR:				
0216	Foreman	Day	.1	₹ 425.00	₹ 42.50
0215	Fitter grade-1	Day	.15	₹ 380.00	₹ 57.00
0212	Helper	Day	.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 1,967.59
	Add for hire charges of Drill machine, drill bits etc.	@	2.0%		₹ 39.35
	TOTAL				₹ 2,006.94
	Add for Sundries and contingencies	@	3%		₹ 60.21
	TOTAL				₹ 2,067.15
	Add for Electricity	@	0.5%		₹ 10.34
	TOTAL				₹ 2,077.48
	Add 15% for contractor's profit and overheads	@	15%		₹ 311.62
	Cost for 10 (ten) nos bat clamps				₹ 2,389.11
	Cost for one no.				₹ 238.91
	Say				₹ 238.90
18.77	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron/ cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5mm flat of specified shape, projecting 75mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners including drilling necessary holes in brick wall/ CC/ RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30mm x1.6mm galvanised M.S. flats of specified shape and of total length 420mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6mm, one bolts on each side of the pipe.				
18.77.3	Total bracket length 1040 mm of approved shape and design (for three 100mm dia pipes)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos.M.S holder bat clamp				
	MATERIALS:				
	(a) Quantity of M.S. Flats and galvanised M.s flats for three pipe				
	(i) 50x5 mm M.S. flats				
	10x 1.04 = 10.40 m				
	Add wastage = 0.50 m				
	Total = 10.90 m				

	i.e. 10.90 x 1.97 kg/m = 21.47 kg or 0.21 q				
	(ii) 30x1.6 mm Galvanised M.S. flats				
	10x 3x 0.42 = 12.60 m				
	Add wastage = 0.60 m				
	Total = 13.20 m				
	i.e. 13.20 x 0.38 kg/m = 5.02 kg or 0.05 q				
	MATERIALS:				
05026	50x5 mm M.S. flats	q	0.21	₹ 3,992.00	₹ 838.32
05026	30x1.6 mm Galvanised M.S. flats	q	0.05	₹ 3,992.00	₹ 199.60
18169	Expansion hold fastners 6 mm dia with bolts	Nos	40.00	₹ 15.00	₹ 600.00
	10x4=40 Nos				
05017	25x6 mm bolts (for single pipe 10x3x2= 60 Nos.)	q	0.045	₹ 6,749.00	₹ 303.71
	Fabrication including applying priming coat to bat clamps in a reputed workshop (Rate is confirmed from local workshop)	Nos	10	₹ 25.00	₹ 250.00
	CARRIAGE:				
0468	M.S. Flats	t	0.026	₹ 110.94	₹ 2.88
	LABOUR:				
0216	Foreman	Day	.15	₹ 425.00	₹ 63.75
0215	Fitter grade-1	Day	.2	₹ 380.00	₹ 76.00
0212	Helper	Day	.2	₹ 300.00	₹ 60.00
	TOTAL				₹ 2,394.26
	Add for hire charges of Drill machine, drill bits etc.	@	2.5%		₹ 59.86
	TOTAL				₹ 2,454.12
	Add for Sundries and contingencies	@	3%		₹ 73.62
	TOTAL				₹ 2,527.74
	Add for Electricity	@	0.5%		₹ 12.64
	TOTAL				₹ 2,540.38
	Add 15% for contractor's profit and overheads	@	15%		₹ 381.06
	Cost for 10 (ten) nos bat clamps				₹ 2,921.43
	Cost for one no.				₹ 292.14
	Say				₹ 292.10
18.78	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.:				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				
18186	Wall mounted water closet of size 780x370x690 mm	each	1.00	₹ 4,650.00	₹ 4,650.00
18187	Adjustable Vitreous China Cistern with fittings of flushing capacity 3litre/6 litre (adjustable to 4 litre/8 litre)	each	1.00	₹ 2,000.00	₹ 2,000.00
18062	White plastic seat (solid)with lid C.P.brass hinges and rubber buffers	each	1.00	₹ 340.00	₹ 340.00
	LABOUR				
215	Fitter (grade-I)	Day	1.00	₹ 380.00	₹ 380.00
219	Mason 1st class	Day	1.00	₹ 425.00	₹ 425.00
203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 8,095.00
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	7%		₹ 566.65
	TOTAL				₹ 8,661.65
	Add for Sundries and contingencies	@	3%		₹ 242.85
	TOTAL				₹ 8,904.50
	Add 1% for water charges	@	1%		₹ 89.05
	TOTAL				₹ 8,993.55
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,349.03
	Cost for 1 No.				₹ 10,342.58
	Say				₹ 10,342.60

18.79	Providing & fixing white vitreous china water less urinal of size 600 x 330 x 315 mm having antibacterial /germs free ceramic surface, fixed with cartridge having debris catcher and hygiene seal.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				
18188	White Vitreous China Waterless Urinal of size 600 x 330x315 mm	each	1.00	₹ 10,200.00	₹ 10,200.00
18189	Cistern with fittings for Waterless Urinal	each	1.00	₹ 2,400.00	₹ 2,400.00
	LABOUR				
215	Fitter (grade-I)	Day	1.00	₹ 380.00	₹ 380.00
219	Mason 1st class	Day	1.00	₹ 425.00	₹ 425.00
203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 13,705.00
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	7%		₹ 959.35
	TOTAL				₹ 14,664.35
	Add for Sundries and contingencies	@	3%		₹ 411.15
	TOTAL				₹ 15,075.50
	Add 1% for water charges	@	1%		₹ 150.76
	TOTAL				₹ 15,226.26
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,283.94
	Cost for 1 No.				₹ 17,510.19
	Say				₹ 17,510.20
18.80	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				
18190	Battery based infrared sensor operated White Vitreous Urinal of approx size 610 x 390 x 370 mm	each	1.00	₹ 4,000.00	₹ 4,000.00
	LABOUR				
215	Fitter (grade-I)	Day	0.50	₹ 425.00	₹ 212.50
203	Beldar	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 4,362.50
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	7%		₹ 305.38
	TOTAL				₹ 4,667.88
	Add for Sundries and contingencies	@	3%		₹ 130.88
	TOTAL				₹ 4,798.75
	Add 1% for water charges	@	1%		₹ 47.99
	TOTAL				₹ 4,846.74
	Add 15% for contractor's profit and overheads	@	15%		₹ 727.01
	Cost for 1 No.				₹ 5,573.75
	Say				₹ 5,573.70
18.81	Providing and fixing floor mounted, white vitreous china single piece, double traps syphonic water closet of approved brand/make, shape, size and pattern including integrated white vitreous china cistern of capacity 10 litres with dual flushing system, including all fittings and fixtures with seat cover, cistern fittings, nuts, bolts and gasket etc including making connection with the existing P/S trap, complete in all respect as per directions of Engineer-in-Charge.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pan				
	MATERIALS				

18191	Floor mounted white vitrous china double trap syphonic WC with 10 litre cistern and all fittings & fixtures,seat cover etc	each	1.00	₹ 9,000.00	₹ 9,000.00
	LABOUR				
215	Fitter (grade-I)	Day	1.00	₹ 380.00	₹ 380.00
219	Mason 1st class	Day	1.00	₹ 425.00	₹ 425.00
203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 10,105.00
	Add Carriage for materials and cost for overflow arrangements and special for overflow pipe, Read lead,white lead ,plug, screws, Gaskin,cement,sand and grit for repairs and fixing, painting of fitting etc.	@	7%		₹ 707.35
	TOTAL				₹ 10,812.35
	Add for Sundries and contingencies	@	3%		₹ 303.15
	TOTAL				₹ 11,115.50
	Add 1% for water charges	@	1%		₹ 111.16
	TOTAL				₹ 11,226.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,684.00
	Cost for 1 No.				₹ 12,910.65
	Say				₹ 12,910.70
18.82	Rate as per item no 11.38 of SH :roofing work				
18.83	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes (working pressure 6 kg / cm2) conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion:				
18.83	Single socketed pipe - 110 mm OD working pressure 6 kg / cm2				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 6.0m length of PVC pipe				
181200	Pipe- 110mm OD	m	6	₹ 190.00	₹ 1,140.00
11073	Seal ring	m	1	₹ 14.00	₹ 14.00
	LABOUR:				
203	Belder	Day	0.45	₹ 300.00	₹ 135.00
0215	Fitter	Day	0.23	₹ 380.00	₹ 87.40
0212	Helper	Day	0.11	₹ 300.00	₹ 33.00
					₹ 1,409.40
	Add for jointing materials, carriage of pipes	@	2%		₹ 28.19
					₹ 1,437.59
	Add for scaffolding	@	2%		₹ 21.56
					₹ 1,459.15
	Add for Sundries and contingencies	@	3%		₹ 43.77
					₹ 1,502.93
	Add for contractor's profit and overheads	@	15%		₹ 225.44
	Cost of providing and fixing on wall face PVC rain water pipe of 4.00m length				₹ 1,728.37
	Cost per m				₹ 288.06
	Rate per m	Say			₹ 288.10
18.84	Rate for item no 18.84.1 to 18.84.6 follow the of of item no 11.39.1 to 11.39.6 of SH :roofing work				
18.84.7	Double equal junction of required degree without door				
18.84.7.1	75x75x75 x75 mm without door				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
18192	without door- 75x75x75 x75 mm	Each	1	₹ 60.00	₹ 60.00

11073	Seal ring	Each	4	₹ 9.00	₹ 36.00
	LABOUR:				
0215	Fitter	Day	.005	₹ 380.00	₹ 1.90
0212	Helper	Day	.02	₹ 300.00	₹ 6.00
					₹ 103.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 1.04
					₹ 104.94
	Add for scaffolding	@	1%		₹ 1.05
					₹ 105.99
	Add for Sundries and contingencies	@	3%		₹ 3.18
					₹ 109.17
	Add for contractor's profit and overheads	@	15%		₹ 16.38
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 125.54
	Cost per fitting				₹ 125.54
	Rate per fitting	Say			₹ 125.50
18.84.7	Double equal junction of required degree without door				
18.84.7.2	100x100x100 x100 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
18193	100x100x100 x100 mm	Each	1	₹ 90.00	₹ 90.00
11072	Seal ring	Each	4	₹ 14.00	₹ 56.00
	LABOUR:				
0215	Fitter	Day	.005	₹ 380.00	₹ 1.90
0212	Helper	Day	.02	₹ 300.00	₹ 6.00
					₹ 153.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 1.54
					₹ 155.44
	Add for scaffolding	@	1%		₹ 1.55
					₹ 156.99
	Add for Sundries and contingencies	@	3%		₹ 4.71
					₹ 161.70
	Add for contractor's profit and overheads	@	15%		₹ 24.26
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 185.96
	Cost per fitting				₹ 185.96
	Rate per fitting	Say			₹ 186.00
18.84.8	Double equal junction of required degree with door				
18.84.8.1	75x75x75 x75 mm with door				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
18194	without door- 75x75x75 x75 mm	Each	1	₹ 85.00	₹ 85.00
11073	Seal ring	Each	4	₹ 9.00	₹ 36.00
	LABOUR:				
0215	Fitter	Day	.005	₹ 380.00	₹ 1.90
0212	Helper	Day	.02	₹ 300.00	₹ 6.00
					₹ 128.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 1.29
					₹ 130.19
	Add for scaffolding	@	1%		₹ 1.30
					₹ 131.49
	Add for Sundries and contingencies	@	3%		₹ 3.94
					₹ 135.44
	Add for contractor's profit and overheads	@	15%		₹ 20.32
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 155.75
	Cost per fitting				₹ 155.75
	Rate per fitting	Say			₹ 155.80

18.84.8	Double equal junction of required degree with door				
18.84.8.2	100x100x100 x100 mm with door				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
18195	100x100x100 x100 mm	Each	1	₹ 120.00	₹ 120.00
11072	Seal ring	Each	4	₹ 14.00	₹ 56.00
	LABOUR:				
0215	Fitter	Day	.005	₹ 380.00	₹ 1.90
0212	Helper	Day	.02	₹ 300.00	₹ 6.00
					₹ 183.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 1.84
					₹ 185.74
	Add for scaffolding	@	1%		₹ 1.86
					₹ 187.60
	Add for Sundries and contingencies	@	3%		₹ 5.63
					₹ 193.22
	Add for contractor's profit and overheads	@	15%		₹ 28.98
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 222.21
	Cost per fitting				₹ 222.21
	Rate per fitting	Say			₹ 222.20
18.84.9	Double unequal junction of required degree without				
18.84.9.1	110x110x75 x 75 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
18196	110x110x75 x 75 mm	Each	1	₹ 150.00	₹ 150.00
11072	Seal ring	Each	4	₹ 14.00	₹ 56.00
	LABOUR:				
0215	Fitter	Day	.005	₹ 380.00	₹ 1.90
0212	Helper	Day	.02	₹ 300.00	₹ 6.00
					₹ 213.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 2.14
					₹ 216.04
	Add for scaffolding	@	1%		₹ 2.16
					₹ 218.20
	Add for Sundries and contingencies	@	3%		₹ 6.55
					₹ 224.75
	Add for contractor's profit and overheads	@	15%		₹ 33.71
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹ 258.46
	Cost per fitting				₹ 258.46
	Rate per fitting	Say			₹ 258.50
18.84.10	Double unequal junction of required degree with door				
18.84.10.1	110x110x75 x 75 mm				
Code	Discription	Unit	Quantity	Rate	Amount
	Considering 1 No. PVC moulded fitting				
	MATERIALS				
18197	110x110x75 x 75 mm	Each	1	₹ 180.00	₹ 180.00
11072	Seal ring	Each	4	₹ 14.00	₹ 56.00
	LABOUR:				
0215	Fitter	Day	.005	₹ 380.00	₹ 1.90
0212	Helper	Day	.02	₹ 300.00	₹ 6.00
					₹ 243.90
	Add for jointing materials, carriage of fitting	@	1%		₹ 2.44
					₹ 246.34

	Add for scaffolding	@	1%		₹	2.46
					₹	248.80
	Add for Sundries and contingencies	@	3%		₹	7.46
					₹	256.27
	Add for contractor's profit and overheads	@	15%		₹	38.44
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹	294.71
	Cost per fitting				₹	294.71
	Rate per fitting	Say			₹	294.70
18.84.11	Single unequal junction of required degree without door					
18.84.11.1	110x110x75 mm					
Code	Discription	Unit	Quantity	Rate	Amount	
	Considering 1 No. PVC moulded fitting					
	MATERIALS					
18198	110x110x75 mm	Each	1	₹ 125.00	₹	125.00
11072	Seal ring	Each	4	₹ 14.00	₹	56.00
	LABOUR:					
0215	Fitter	Day	.005	₹ 380.00	₹	1.90
0212	Helper	Day	.02	₹ 300.00	₹	6.00
					₹	188.90
	Add for jointing materials, carriage of fitting	@	1%		₹	1.89
					₹	190.79
	Add for scaffolding	@	1%		₹	1.91
					₹	192.70
	Add for Sundries and contingencies	@	3%		₹	5.78
					₹	198.48
	Add for contractor's profit and overheads	@	15%		₹	29.77
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹	228.25
	Cost per fitting				₹	228.25
	Rate per fitting	Say			₹	228.20
18.84.12	Single unequal junction of required degree with door					
18.84.12.1	110x110x75 mm					
Code	Discription	Unit	Quantity	Rate	Amount	
	Considering 1 No. PVC moulded fitting					
	MATERIALS					
18199	100x100x100 x100 mm	Each	1	₹ 150.00	₹	150.00
11072	Seal ring	Each	4	₹ 14.00	₹	56.00
	LABOUR:					
0215	Fitter	Day	.005	₹ 380.00	₹	1.90
0212	Helper	Day	.02	₹ 300.00	₹	6.00
					₹	213.90
	Add for jointing materials, carriage of fitting	@	1%		₹	2.14
					₹	216.04
	Add for scaffolding	@	1%		₹	2.16
					₹	218.20
	Add for Sundries and contingencies	@	3%		₹	6.55
					₹	224.75
	Add for contractor's profit and overheads	@	15%		₹	33.71
	Cost of providing and fixing on wall face one No. PVC moulded fitting				₹	258.46
	Cost per fitting				₹	258.46
	Rate per fitting	Say			₹	258.50
18.85	Rate for item no 18.85 follow the of of item no 11.40 of SH :roofing work					
18.86	Rate for item no 18.86 follow the of of item no 11.41 of SH :roofing work					

S U B - H E A D - 1 9



W A T E R S U P P L Y

SUB HEAD: 19.0 WATER SUPPLY
BASIC RATES

Code No.	Description	Unit	Rate
0114	Derrick monkey rope and other accessories- Hire charges	Day	₹ 864.00
0203	Belder	Day	₹ 300.00
0205	Bhisti/Waterman	Day	₹ 300.00
0208	Carpenter (average)	Day	₹ 400.00
0210	Carpenter 2nd Class	Day	₹ 380.00
0212	Coolie/Helper	Day	₹ 300.00
0214	Fitter (2nd class)	Day	₹ 300.00
0215	Fitter (grade-1)	Day	₹ 380.00
0216	Foreman	Day	₹ 425.00
0218	Mason (average)	Day	₹ 400.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0227	Painter	Day	₹ 340.00
	CARRIAGE		
0406	Bricks	1000 Nos	₹ 332.82
0405	Brick/ Stone aggregate below 40 mm nominal size	cum	₹ 159.75
0468	Steel	tonne	₹ 110.94
0404	Brick/ Stone aggregate 40 mm nominal size and above	cum	₹ 172.74
0421	Cement	tonne	₹ 110.94
0425	Fine Sand	cum	₹ 142.63
0427	G.I. pipes below 100 mm dia	tonne	₹ 110.94
0407	Cast iron fittings	tonne	₹ 110.94
0456	Spun iron S & S pipes 100 mm dia	100 metre	₹ 272.80
0457	Spun iron S & S pipes 125 mm dia	100 metre	₹ 363.73
0458	Spun iron S & S pipes 150 mm dia	100 metre	₹ 454.67
0459	Spun iron S & S pipes 200 mm dia	100 metre	₹ 737.30
0460	Spun iron S & S pipes 250 mm dia	100 metre	₹ 1,049.23
0461	Spun iron S & S pipes 300 mm dia	100 metre	₹ 1,299.05
0462	Spun iron S & S pipes 350 mm dia	100 metre	₹ 1,818.67
0463	Spun iron S & S pipes 400 mm dia	100 metre	₹ 2,480.01

Code No.	Description	Unit	Rate
0464	Spun iron S & S pipes 450 mm dia	100 metre	₹ 3,031.11
0465	Spun iron S & S pipes 500 mm dia	100 metre	₹ 3,011.11
0466	Spun iron S & S pipes 600mm dia	100 metre	₹ 4,546.68
0433	Pig lead	tonne	₹ 110.94
0423	Ductile iron pipes (k7) 100 mm dia	100 metre	₹ 272.80
0409	Cast iron pipes 150 mm dia	100 metre	₹ 454.67
0410	Cast iron pipes 200 mm dia	100 metre	₹ 737.30
0411	Cast iron pipes 250 mm dia	100 metre	₹ 1,049.23
0412	Cast iron pipes 300 mm dia	100 metre	₹ 1,299.05
0413	Cast iron pipes 350 mm dia	100 metre	₹ 1,818.67
0414	Cast iron pipes 400 mm dia	100 metre	₹ 2,480.01
0415	Cast iron pipes 450 mm dia	100 metre	₹ 3,031.11
0416	Cast iron pipes 500 mm dia	100 metre	₹ 3,031.11
0417	Cast iron pipes 600 mm dia	100 metre	₹ 4,546.68
0418	Cast iron pipes 700 mm dia	100 metre	₹ 4,546.68
0419	Cast iron pipes 800 mm dia	100 metre	₹ 4,546.68
0420	Cast iron pipes 900 mm dia	100 metre	₹ 6,820.02
0408	Cast iron pipes 1000 mm dia	100 metre	₹ 9,093.35
	MATERIALS		
04004	Stone Aggregate (Single size) : 40 mm nominal size	cum	₹ 3,532.00
04006	Stone Aggregate (Single size) : 20 mm nominal size	cum	₹ 3,969.00
04007	Stone Aggregate (Single size) : 12 mm nominal size	cum	₹ 4,005.00
04010	Safeda ballies 125 mm diameter	metre	₹ 59.00
03001	Portland Cement	tonne	₹ 6,100.00
11016	Fuel wood	quintal	₹ 480.00
02004	Kerosene oil	litre	₹ 48.00
12008	Anticorrosive bituminous paint (black)	litre	₹ 125.00
12040	Synthetic enamel paint in all shades except black or chocolate shade	litre	₹ 190.00
02002	Fine sand (local quarry)	cum	₹ 300.00
02003	Fine sand (selected quarry)	cum	₹ 370.00
05062	Twisted steel / deformed bars	quintal	₹ 4,102.00
04014	Second local wood in planks	10 cudm	₹ 145.00

Code No.	Description	Unit	Rate
19001	Bleaching powder	quintal	₹ 2,400.00
19002	Surface box for stop cock	each	₹ 130.00
19003	Surface box for sluice valve	each	₹ 210.00
19004	Surface box for water meter	each	₹ 260.00
19005	Brass bib-cock 15 mm dia	each	₹ 215.00
19006	Brass bib-cock 20 mm dia	each	₹ 265.00
19007	Brass stop-cock 15 mm dia	each	₹ 225.00
19008	Brass stop-cock 20 mm dia	each	₹ 320.00
19009	C.I.mouth, brass ferrule 15 mm dia	each	₹ 140.00
19010	C.I.mouth, brass ferrule 20 mm dia	each	₹ 165.00
19011	C.I.mouth, brass ferrule 25 mm dia	each	₹ 228.00
19012	Rubber insertions for 80 mm dia pipe joints	each	₹ 13.00
19013	Rubber insertions for 100 mm dia pipe joints	each	₹ 17.00
19014	Rubber insertions for 125 mm dia pipe joints	each	₹ 19.00
19015	Rubber insertions for 150 mm dia pipe joints	each	₹ 22.00
19016	Rubber insertions for 200 mm dia pipe joints	each	₹ 29.00
19017	Rubber insertions for 250 mm dia pipe joints	each	₹ 44.00
19018	Rubber insertions for 300 mm dia pipe joints	each	₹ 55.00
19019	Rubber insertions for 350 mm dia pipe joints	each	₹ 66.00
19020	Rubber insertions for 400 mm dia pipe joints	each	₹ 96.00
19021	Rubber insertions for 450 mm dia pipe joints	each	₹ 120.00
19022	Rubber insertions for 500 mm dia pipe joints	each	₹ 154.00
19023	Rubber insertions for 600 mm dia pipe joints	each	₹ 171.00
1397	Pig lead	kilogram	₹ 140.00
19024	S & S.C.I.standard specials up to 300 mm dia (heavy class)	quintal	₹ 3,600.00
19025	S & S.C.I.standard specials over 300 mm dia (heavy class)	quintal	₹ 3,700.00
19026	Flanged C.I. standard specials up to 300 mm dia(heavy class)	quintal	₹ 5,800.00
19027	Flanged C.I. standard specials over 300 mm dia(heavy class)	quintal	₹ 6,200.00
19028	G.I. pipes 15 mm dia	metre	₹ 90.00
19029	G.I. pipes 20 mm dia	metre	₹ 120.00
19030	G.I. pipes 25 mm dia	metre	₹ 150.00
19031	G.I. pipes 32 mm dia	metre	₹ 210.00

Code No.	Description	Unit	Rate
19032	G.I. pipes 40 mm dia	metre	₹ 240.00
19033	G.I. pipes 50 mm dia	metre	₹ 340.00
19034	G.I. pipes 65 mm dia	metre	₹ 405.00
19035	G.I. pipes 80 mm dia	metre	₹ 515.00
19036	G.I. back (jam) nuts 25 mm dia	each	₹ 8.00
19037	G.I. back (jam) nuts 65 mm dia	each	₹ 23.00
19038	G.I. tees (equal) 25 mm	each	₹ 64.00
19039	G.I. tees (equal) 65 mm	each	₹ 280.00
19040	G.I. Union 15 mm nominal bore	each	₹ 48.00
19041	G.I. Union 20 mm nominal bore	each	₹ 64.00
19042	G.I. Union 25 mm nominal bore	each	₹ 80.00
19043	G.I. Union 32 mm nominal bore	each	₹ 127.00
19044	G.I. Union 40 mm nominal bore	each	₹ 180.00
19045	G.I. Union 50 mm nominal bore	each	₹ 239.00
19046	G.I. Union 65 mm nominal bore	each	₹ 420.00
19047	G.I. Union 80 mm nominal bore	each	₹ 500.00
19048	Polyethylene water storage tank with cover and suitable locking arrangement	per litre	₹ 7.25
19049	Unplasticised P.V.C. connection pipe with brass union 30 cm long 15 mm bore	each	₹ 35.00
19050	Unplasticised P.V.C. connection pipe with brass union 30 cm long 20 mm bore	each	₹ 50.00
19051	Unplasticised P.V.C. connection pipe with brass union 45 cm long 15 mm bore	each	₹ 50.00
19052	Unplasticised P.V.C. connection pipe with brass union 45 cm long 20 mm bore	each	₹ 70.00
19053	S.C.I. hand pump	each	₹ 750.00
19054	Shower rose C.P. brass for 15 to 20 mm inlet 100 mm dia	each	₹ 70.00
19055	Shower rose C.P. brass for 15 to 20 mm inlet 150 mm dia	each	₹ 100.00
19056	Spun yarn	kilogram	₹ 43.00
19057	Strainer brass 40 mm dia 1.5 metre long	each	₹ 580.00
19058	H.P. or L.P. ball valve with polythene floats: 15 mm dia	each	₹ 250.00
19059	H.P. or L.P. ball valve with polythene floats: 20 mm dia	each	₹ 372.00
19060	H.P. or L.P. ball valve with polythene floats: 25 mm dia	each	₹ 430.00

Code No.	Description	Unit	Rate
19061	Brass full way valve with C.I. wheel (screwed end) 25 mm dia	each	₹ 336.00
19062	Brass full way valve with C.I. wheel (screwed end) 32 mm dia	each	₹ 424.00
19063	Brass full way valve with C.I. wheel (screwed end) 40 mm dia	each	₹ 473.00
19064	Brass full way valve with C.I. wheel (screwed end) 50 mm dia	each	₹ 691.00
19065	Brass full way valve with C.I. wheel (screwed end) 65 mm dia	each	₹ 1,002.00
19066	Brass full way valve with C.I. wheel (screwed end) 80 mm dia	each	₹ 1,660.00
19067	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	₹ 340.00
19068	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	₹ 437.00
19069	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	₹ 587.00
19070	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	₹ 884.00
19071	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	₹ 1,553.00
19072	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	₹ 2,204.00
19073	C.I.sluiice valve (with caps) class I : 100 mm dia	each	₹ 2,705.00
19074	C.I.sluiice valve (with caps) class I : 125 mm dia	each	₹ 3,385.00
19075	C.I.sluiice valve (with caps) class I : 150 mm dia	each	₹ 4,064.00
19076	C.I.sluiice valve (with caps) class I : 200 mm dia	each	₹ 7,735.00
19077	C.I.sluiice valve (with caps) class I : 250 mm dia	each	₹ 11,520.00
19078	C.I.sluiice valve (with caps) class I : 300 mm dia	each	₹ 14,196.00
19079	Bolts and nuts 16 mm dia 60 mm long	each	₹ 12.00
19080	Bolts and nuts 16 mm dia 65 mm long	each	₹ 12.00
19081	Bolts and nuts 20 mm dia 65 mm long	each	₹ 17.00
19082	Bolts and nuts 20 mm dia 70 mm long	each	₹ 17.00
19083	Bolts and nuts 20 mm dia 75 mm long	each	₹ 17.00
19084	Bolts and nuts 20 mm dia 80 mm long	each	₹ 19.00
19085	Bolts and nuts 24 mm dia 85 mm long	each	₹ 34.00
19086	Bolts and nuts 24 mm dia 90 mm long	each	₹ 37.00
19087	Bolts and nuts 27 mm dia 100 mm long	each	₹ 43.00

Code No.	Description	Unit	Rate
06001	Bricks 1st Class	1000 Nos	₹ 8,027.00
06002	Bricks 2nd Class	1000 Nos	₹ 6,690.00
19088	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	₹ 372.00
19089	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	₹ 551.00
19090	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	₹ 723.00
19091	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	₹ 1,019.00
19092	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	₹ 1,782.00
19093	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	₹ 2,332.00
19094	C.I.sluiice valve (with caps) class II : 100 mm dia	each	₹ 2,791.00
19095	C.I.sluiice valve (with caps) class II : 125 mm dia	each	₹ 3,528.00
19096	C.I.sluiice valve (with caps) class II : 150 mm dia	each	₹ 4,293.00
19097	C.I.sluiice valve (with caps) class II : 200 mm dia	each	₹ 8,300.00
19098	C.I.sluiice valve (with caps) class II : 250 mm dia	each	₹ 11,734.00
19099	C.I.sluiice valve (with caps) class II : 300 mm dia	each	₹ 14,668.00
19100	C.P. Brass bib cock 15 mm	each	₹ 380.00
19101	C.P. Brass long nose bibcock 15 mm	each	₹ 350.00
19102	C.P. Brass long body bibcock 15 mm	each	₹ 400.00
19103	C.P. Brass stop cock (concealed) 15 mm	each	₹ 430.00
19104	C.P. Brass angle valve 15 mm	each	₹ 390.00
19105	15 mm PTMT bib cock	each	₹ 100.00
19106	15 mm PTMT bib cock with flange (fancy)	each	₹ 155.00
19107	15 mm PTMT bib cock long body with flange	each	₹ 155.00
19108	15 mm dia PTMT stop cock(male thread)	each	₹ 100.00
19109	20 mm dia. PTMT stop cock	each	₹ 135.00
19110	PTMT pillar cock	each	₹ 145.00
19111	PTMT push cock 15 mm dia.	each	₹ 90.00
19112	PTMT push cock 12 mm dia. 20 mm BSP	each	₹ 82.00
19113	PTMT grating 100 mm dia.	each	₹ 26.00
19114	PTMT grating 75 mm dia.	each	₹ 34.00
19115	125 mm grating with waste hole	each	₹ 35.00
19116	Rectangular type with openable circular lid 150 mm size 18 mm high with 100 mm dia. (110 gm)	each	₹ 125.00
19117	Double acting air valve 50 mm	each	₹ 4,000.00
19118	Double acting air valve 80 mm	each	₹ 5,000.00
19119	Double acting air valve 100 mm	each	₹ 6,500.00

Code No.	Description	Unit	Rate
19120	Water meter (including testing charges) 80 mm	each	₹ 2,400.00
19121	Water meter (including testing charges) 100 mm	each	₹ 3,500.00
19122	Water meter (including testing charges) 150 mm	each	₹ 5,000.00
19123	Water meter (including testing charges) 200 mm	each	₹ 5,800.00
19124	Dirt box strainer 80 mm	each	₹ 2,800.00
19125	Dirt box strainer 100 mm	each	₹ 4,600.00
19126	Dirt box strainer 150 mm	each	₹ 5,600.00
19127	Dirt box strainer 200 mm	each	₹ 8,400.00
19128	PTMT Ball Cock 15mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 120.00
19129	PTMT Ball Cock 20mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 175.00
19130	PTMT Ball Cock 25mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 340.00
19131	PTMT Ball Cock 40mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 560.00
19132	PTMT Ball Cock 50mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	₹ 1,010.00
19133	PTMT Angle Stop cock with Flange 15mm	Each	₹ 110.00
19134	PTMT Swiveling shower 15mm	Each	₹ 80.00
19135	PTMT Soap Dish/Holder 138x102x75mm	Each	₹ 90.00
19136	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 100mm dia	Metre	₹ 880.00
19137	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 150mm dia	Metre	₹ 1,300.00
19138	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 200mm dia	Metre	₹ 1,800.00
19139	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 250mm dia	Metre	₹ 2,300.00
19140	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 300mm dia	Metre	₹ 2,950.00
19141	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 350mm dia	Metre	₹ 3,450.00
19142	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 400mm dia	Metre	₹ 5,000.00
19143	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 450mm dia	Metre	₹ 5,500.00
19144	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 500mm dia	Metre	₹ 7,200.00
19145	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 600mm dia	Metre	₹ 8,100.00
19146	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 700mm dia	Metre	₹ 11,250.00
19147	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 750mm dia	Metre	₹ 12,900.00
19148	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 800mm dia	Metre	₹ 13,150.00

Code No.	Description	Unit	Rate
19149	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 900mm dia	Metre	₹ 15,400.00
19150	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 1000mm dia	Metre	₹ 17,300.00
19151	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 100mm dia	Each	₹ 30.00
19152	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 150mm dia	Each	₹ 35.00
19153	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 200mm dia	Each	₹ 60.00
19154	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 250mm dia	Each	₹ 70.00
19155	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 300mm dia	Each	₹ 125.00
19156	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 350mm dia	Each	₹ 130.00
19157	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 400mm dia	Each	₹ 250.00
19158	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 450mm dia	Each	₹ 270.00
19159	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 500mm dia	Each	₹ 300.00
19160	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 600mm dia	Each	₹ 375.00
19161	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 650mm dia	Each	₹ 575.00
19162	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 700mm dia	Each	₹ 700.00
19163	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 800mm dia	Each	₹ 750.00
19164	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 900mm dia	Each	₹ 990.00
19165	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 1000mm dia	Each	₹ 1,180.00
19166	Ductile Iron K - 12 specials suitable for push on jointing up to 600mm dia	Quintal	₹ 12,000.00
19167	Ductile Iron K - 12 specials suitable for push on jointing over 600mm dia	Quintal	₹ 18,000.00
19168	Ductile Iron specials suitable for mechanical jointing as per I.S. 9523 -up to 600mm dia	Quintal	₹ 13,451.00
19169	Ductile Iron Specials suitable for mechanical jointing as per I.S. 9523 over 600mm dia	Quintal	₹ 19,600.00
19170	Ductile Iron Pipe Class K-9 flanges and welding 100mm dia	Metre	₹ 1,275.00
19171	Ductile Iron Pipe Class K-9 flanges and welding 150 dia	metre	₹ 1,764.00
19172	Ductile Iron Pipe Class K-9 flanges and welding 200mm dia	Metre	₹ 2,287.00
19173	Ductile Iron Pipe Class K-9 flanges and welding 250mm dia	Metre	₹ 3,200.00
19174	Ductile Iron Pipe Class K-9 flanges and welding 300mm dia	metre	₹ 4,100.00

Code No.	Description	Unit	Rate
19175	Ductile Iron Pipe Class K-9 flanges and welding 350mm dia	Metre	₹ 5,000.00
19176	Ductile Iron Pipe Class K-9 flanges and welding 400mm dia	Metre	₹ 6,550.00
19177	Ductile Iron Pipe Class K-9 flanges and welding 450mm dia	Metre	₹ 7,100.00
19178	Ductile Iron Pipe Class K-9 flanges and welding 500mm dia	Metre	₹ 9,900.00
19179	Ductile Iron Pipe Class K-9 flanges and welding 600mm dia	Metre	₹ 12,800.00
19180	Ductile Iron Pipe Class K-9 flanges and welding 700mm dia	Metre	₹ 15,800.00
19181	S&S Centrifugally (Spun) C.I. Pipe class LA 100mm dia	Metre	₹ 900.00
19182	S&S Centrifugally (Spun) C.I. Pipe class LA 125mm dia	metre	₹ 1,200.00
19183	S&S Centrifugally (Spun) C.I. Pipe class LA 150mm dia	metre	₹ 1,450.00
19184	S&S Centrifugally (Spun) C.I. Pipe class LA 200mm dia	Metre	₹ 2,400.00
19185	S&S Centrifugally (Spun) C.I. Pipe class LA 250mm dia	Metre	₹ 3,000.00
19186	S&S Centrifugally (Spun) C.I. Pipe class LA 300mm dia	Metre	₹ 4,100.00
19187	S&S Centrifugally (Spun) C.I. Pipe class LA 350mm dia	metre	₹ 4,950.00
19188	S&S Centrifugally (Spun) C.I. Pipe class LA 400mm dia	Metre	₹ 6,500.00
19189	S&S Centrifugally (Spun) C.I. Pipe class LA 450mm dia	Metre	₹ 7,900.00
19190	S&S Centrifugally (Spun) C.I. Pipe class LA 500mm dia	Metre	₹ 9,100.00
19191	S&S Centrifugally (Spun) C.I. Pipe class LA 600mm dia	Metre	₹ 12,800.00
19192	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing up to 300mm dia for lead jointing up to 300mm dia	Quintal	₹ 5,150.00
19193	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing over 300mm dia	Quintal	₹ 6,250.00
19194	S&S Centrifugally (Spun) C.I. Pipe specials suitable for mechanical joint as per I.S. 13382 up to 300mm dia	Quintal	₹ 8,500.00
19195	S&S Centrifugally (Spun) C.I. Pipe Specials suitable for mechanical joint as per IS 13382 over 300mm dia	Quintal	₹ 9,100.00
19196	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 100mm dia	Metre	₹ 1,380.00
19197	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 150mm dia	Metre	₹ 2,150.00

Code No.	Description	Unit	Rate
19198	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 200mm dia	Metre	₹ 3,350.00
19199	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 250mm dia	Metre	₹ 4,000.00
19200	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 300mm dia	Metre	₹ 5,120.00
19201	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 350mm dia	Metre	₹ 6,460.00
19202	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 400mm dia	metre	₹ 8,380.00
19203	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 450mm dia	Metre	₹ 10,700.00
19204	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 500mm dia	metre	₹ 13,500.00
19205	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 600mm dia	Metre	₹ 18,400.00
19206	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 100mm dia	Metre	₹ 800.00
19207	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 150mm dia	Metre	₹ 1,170.00
19208	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 200mm dia	Metre	₹ 1,660.00
19209	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 250mm dia	Metre	₹ 2,250.00
19210	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 300mm dia	Metre	₹ 3,150.00
19211	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 350mm dia	Metre	₹ 3,650.00
19212	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 400mm dia	Metre	₹ 4,350.00
19213	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 450mm dia	Metre	₹ 5,150.00
19214	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 500mm dia	Metre	₹ 6,150.00
19215	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 600mm dia	metre	₹ 8,110.00
19216	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 700mm dia	Metre	₹ 10,050.00
19217	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 800mm dia	Metre	₹ 14,000.00
19218	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 900mm dia	metre	₹ 17,250.00
19219	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 1000mm dia	metre	₹ 20,950.00

Code No.	Description	Unit	Rate
19220	P.T.M.T. Bib cock with nozzle 15mm	each	₹ 130.00
19221	P.T.M.T. Stop cock (concealed) 15mm	each	₹ 150.00
19222	15 mm nominal bore and 30 cm length PVC connection pipe with P.T.M.T. Nuts	each	₹ 38.00
19223	15 mm nominal bore and 45 cm length PVC connection pipe with P.T.M.T. Nuts	each	₹ 40.00
19224	P.T.M.T. extension nipple 15mm	each	₹ 25.00
19225	P.T.M.T. extension nipple 20mm	each	₹ 35.00
19226	P.T.M.T. extension nipple 25mm	each	₹ 45.00
19227	1216 mm PE-AL-PE Composite pressure pipe	Metre	₹ 90.00
19228	1620 mm PE-AL-PE Composite pressure pipe	Metre	₹ 110.00
19229	2025 mm PE-AL-PE Composite pressure pipe	Metre	₹ 140.00
19230	2532 mm PE-AL-PE Composite pressure pipe	Metre	₹ 175.00
19231	3240 mm PE-AL-PE Composite pressure pipe	Metre	₹ 260.00
19232	4050 mm PE-AL-PE Composite pressure pipe	Metre	₹ 350.00
12037	Steel Primer	litre	₹ 85.00
19233	Poly propylene- Random - Co - Polymer (PPR) pipes SDR 7.4 - 16 Outer dia	metre	₹ 38.00
19234	Poly propylene - Random - Co - Polymer (PPR) pipes SDR 7.4 -20mm Outer dia.	metre	₹ 58.00
19235	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 25 mm outer dia.	metre	₹ 75.00
19236	Poly propylene - Random - Co - poymer (PPR) pipes SDR 7.4 -32 mm Outer dia.	metre	₹ 112.00
19237	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -40mm Outer dia.	metre	₹ 150.00
19238	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -50mm Outer dia.	metre	₹ 260.00
19239	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -63mm Outer dia.	metre	₹ 700.00
19240	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -75mm Outer dia.	metre	₹ 790.00
19241	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 -90 mm Outer dia.	metre	₹ 950.00
19242	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11 -110mm Outer dia.	metre	₹ 1,050.00
19243	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11-160mm Outer dia.	metre	₹ 1,750.00
19244	Chlorinated Polyvinyl - chloride (CPVC) pipe 15 mm outer dia.	metre	₹ 45.00
19245	Chlorinated Polyvinyl - chloride (CPVC) pipe 20 mm outer dia.	metre	₹ 65.00

Code No.	Description	Unit	Rate
19246	Chlorinated Polyvinyl - chloride (CPVC) pipe 25 mm outer dia.	metre	₹ 85.00
19247	Chlorinated Polyvinyl - chloride (CPVC) pipe 32 mm outer dia.	metre	₹ 125.00
19248	Chlorinated Polyvinyl - chloride (CPVC) pipe 40 mm outer dia.	metre	₹ 165.00
19249	Chlorinated Polyvinyl - chloride (CPVC) pipe 50 mm outer dia.	metre	₹ 285.00
19250	Chlorinated Polyvinyl - chloride (CPVC) pipe 62.5mm inner dia.	metre	₹ 720.00
19251	Chlorinated Polyvinyl - chloride (CPVC) pipe 75 mm inner dia.	metre	₹ 820.00
19252	Chlorinated Polyvinyl - chloride (CPVC) pipe 100 mm inner dia.	metre	₹ 1,030.00
19253	Chlorinated Polyvinyl - chloride (CPVC) pipe 150 mm inner dia.	metre	₹ 1,700.00
19254	15 mm Battery Based Sensor Pillar Cock	each	₹ 5,800.00

Basic Rates
SUB-HEAD:19.0 WATER SUPPLY
0.2 HIRE CHARGES

Note :- These rates are exclusive of contractor's profit and over heads and are inclusive of rest

Code No.	Description	Unit
0114	Derrick monkey rope and other accessories-Hire charges	Day

Note :- * These rates are average of 1st class and 2nd class categories. T analysis of rate only.

RATE: 02/HIRE CHARGES

f wages for weekly day of

Rate
864.000

SoR11
rate

his is for use in the

SUB HEAD : 19.0					
WATER SUPPLY					
	PE-AL-PE COMPOSITE PRESSURE PIPES				
19.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80° C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge.				
	Internal work - Exposed on wall				
19.1.1:	1216 (16 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19227	PE-AL-PE Composite pressure pipe 1216 (16 mm OD) pipe				
	Add 25% for fitting and wastage etc. on (A)	Metre	12.50	₹ 90.00	₹ 1,125.00
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 1,646.40
	Add for clamps,wooden plugs, screws, cement,sand, grit etc.	@	2%		₹ 32.93
	TOTAL				₹ 1,679.33
	Add for carriage of all materials, ladders & scaffolding etc.	@	1.5%		₹ 25.19
	TOTAL				₹ 1,704.52
	Add for testing of joints etc.	@	2.5%		₹ 42.61
	TOTAL				₹ 1,747.13
	Add for Sundries and contingencies	@	3.0%		₹ 52.41
	TOTAL				₹ 1,799.54
	Add for water charges	@	1.0%		₹ 18.00
	TOTAL				₹ 1,817.54
	Add 15% for contractor's profit and overheads	@	15%		₹ 269.93
	Cost for 10.00 mtr pipe length				₹ 2,087.47
	Rate per mtr.				₹ 208.75
	Say				₹ 208.70
19.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge.				
19.1.2:	1620 (20 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19228	PE-AL-PE Composit pipe 1620 (20 mm OD) pipe				
	Add 25% for fitting and wastage etc. on (A)	Metre	12.50	₹ 110.00	₹ 1,375.00
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.82	₹ 300.00	₹ 246.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 1,944.40
	Add for clamps,wooden plugs, screws, cement,sand, grit etc.	@	1.5 %		₹ 29.17
	TOTAL				₹ 1,973.57

	Add for carriage of all materials, ladders & scaffolding etc.	@	1.2%		₹ 23.68
	TOTAL				₹ 1,997.25
	Add for testing of joints etc.	@	2.25%		₹ 44.94
	TOTAL				₹ 2,042.19
	Add for Sundries and contingencies	@	3.0%		₹ 61.27
	TOTAL				₹ 2,103.45
	Add for water charges	@	1.0%		₹ 21.03
	TOTAL				₹ 2,124.49
	Add 15% for contractor's profit and overheads	@	15%		₹ 315.52
	Cost for 10.00 mtr pipe length				₹ 2,440.00
	Rate per mtr.				₹ 244.00
	Say				₹ 244.00
19.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge.				
19.1.3	2025 (25 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19229	PE-AL-PE Composit pressure pipe 2025 (25 mm OD) pipe				
	Add 25% for fitting and wastage etc. on (A)	Metre	12.50	₹ 140.00	₹ 1,750.00
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.98	₹ 300.00	₹ 294.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 2,367.40
	Add for clamps,wooden plugs, screws, cement,sand, grit etc.	@	1.2 %		₹ 28.41
	TOTAL				₹ 2,395.81
	Add for carriage of all materials, ladders & scaffolding etc.	@	0.9 %		₹ 21.56
	TOTAL				₹ 2,417.37
	Add for testing of joints etc.	@	2.10%		₹ 50.76
	TOTAL				₹ 2,468.14
	Add for Sundries and contingencies	@	3.0%		₹ 74.04
	TOTAL				₹ 2,542.18
	Add for water charges	@	1.0%		₹ 25.42
	TOTAL				₹ 2,567.60
	Add 15% for contractor's profit and overheads	@	15%		₹ 385.14
	Cost for 10.00 mtr pipe length				₹ 2,952.74
	Rate per mtr.				₹ 295.27
	Say				₹ 295.30
19.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge.				
19.1.4	2532 (32 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19230	PE-AL-PE Composite pressure pipe 2532 (32 mm OD) pipe				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 175.00	₹ 2,275.00
	(10.00 + 3.00)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.98	₹ 300.00	₹ 294.00
0212	Helper	Day	0.98	₹ 300.00	₹ 294.00

	TOTAL				₹ 2,988.40
	Add for clamps, wooden plugs, screws, cement, sand, grit etc.	@	1.5 %		₹ 44.83
	TOTAL				₹ 3,033.23
	Add for carriage of all materials, ladders & scaffolding etc.	@	1.0 %		₹ 30.33
	TOTAL				₹ 3,063.56
	Add for testing of joints etc.	@	2.00%		₹ 61.27
	TOTAL				₹ 3,124.83
	Add for Sundries and contingencies	@	3.0%		₹ 93.74
	TOTAL				₹ 3,218.57
	Add for water charges	@	1.0%		₹ 32.19
	TOTAL				₹ 3,250.76
	Add 15% for contractor's profit and overheads	@	15%		₹ 487.61
	Cost for 10.00 mtr pipe length				₹ 3,738.37
	Rate per mtr.				₹ 373.84
	Say				₹ 373.80
19.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80°C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge.				
19.1.5	3240 (40 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19231	PE-AL-PE Composite pressure pipe 3240 (40 mm OD) pipe				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 260.00	₹ 3,380.00
	(10.00 + 3.00)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	1.31	₹ 300.00	₹ 393.00
0212	Helper	Day	1.31	₹ 300.00	₹ 393.00
	TOTAL				₹ 4,291.40
	Add for clamps, wooden plugs, screws, cement, sand, grit etc.	@	1.2 %		₹ 51.50
	TOTAL				₹ 4,342.90
	Add for carriage of all materials, ladders & scaffolding etc.	@	0.75 %		₹ 32.57
	TOTAL				₹ 4,375.47
	Add for testing of joints etc.	@	1.50 %		₹ 65.63
	TOTAL				₹ 4,441.10
	Add for Sundries and contingencies	@	3.0%		₹ 133.23
	TOTAL				₹ 4,574.33
	Add for water charges	@	1.0%		₹ 45.74
	TOTAL				₹ 4,620.08
	Add 15% for contractor's profit and overheads	@	15%		₹ 693.01
	Cost for 10.00 mtr pipe length				₹ 5,313.09
	Rate per mtr.				₹ 531.31
	Say				₹ 531.30
19.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge.				
19.1.6	4050 (50 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19232	PE-AL-PE Composite pressure pipe 4050 (50 mm OD) pipe				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 350.00	₹ 4,550.00
	(10.00 + 3.00)=13.00 mtr.				

	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	1.31	₹ 300.00	₹ 393.00
0212	Helper	Day	1.31	₹ 300.00	₹ 393.00
	TOTAL				₹ 5,461.40
	Add for clamps, wooden plugs, screws, cement, sand, grit etc.	@	0.85 %		₹ 46.42
	TOTAL				₹ 5,507.82
	Add for carriage of all materials, ladders & scaffolding etc.	@	0.60 %		₹ 33.05
	TOTAL				₹ 5,540.87
	Add for testing of joints etc.	@	1.20 %		₹ 66.49
	TOTAL				₹ 5,607.36
	Add for Sundries and contingencies	@	3.0%		₹ 168.22
	TOTAL				₹ 5,775.58
	Add for water charges	@	1.0%		₹ 57.76
	TOTAL				₹ 5,833.34
	Add 15% for contractor's profit and overheads	@	15%		₹ 875.00
	Cost for 10.00 mtr pipe length				₹ 6,708.34
	Rate per mtr.				₹ 670.83
	Say				₹ 670.80
19.2	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80°C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge. Concealed work including cutting chases and making good the wall etc.				
	Concealed work including cutting chases and making good the wall etc.				
19.2.1:	1216 (16 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19227	PE-AL-PE Composite pressure pipe 1216 (16 mm OD)				
	Add 60 % for fitting, clamps and wastage etc on (A)	metre	16.00	₹ 90.00	₹ 1,440.00
	(10.00 + 6.00)=16.00 mtr.				
	Making chases upto 7.5 x 7.5 cm. in walls and making good the same				
(B)	Rate as per item no. 19.78 (cutting Chasing & making good)	metre	10.00	₹ 121.20	₹ 1,212.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 3,173.40
	Add for ladders, scaffolding and carriage of all materials , brass inserts and engineering plastic bends etc.	@	2.0 %		₹ 63.47
	TOTAL				₹ 3,236.87
	Add for testing of joints etc.	@	2.50 %		₹ 80.92
	TOTAL				₹ 3,317.79
	Add for Sundries and contingencies (except on B)	@	3.0%		₹ 63.17
	TOTAL				₹ 3,380.96
	Add for water charges (except on B)	@	1.0%		₹ 21.69
	TOTAL				₹ 3,402.65
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹ 328.60
	Cost for 10.00 mtr pipe length				₹ 3,731.25
	Rate per mtr.				₹ 373.13
	Say				₹ 373.10

19.2	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge. Concealed work including cutting chases and making good the wall etc.				
19.2.2:	1620 (20 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19228	PE-AL-PE Composite pressure pipe 1620 (20 mm OD)				
	Add 60 % for fitting,clamps and wastage etc on (A)	metre	16.00	₹ 110.00	₹ 1,760.00
	(10.00 + 6.00)=16.00 mtr.				
	Making chases upto 7.5 x 7.5 cm. in walls and making good the same				
(B)	Rate as per item no. 19.78 (cutting Chasing & making good)	metre	10.00	₹ 121.20	₹ 1,212.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 3,493.40
	Add for ladders, scaffolding and carriage of all materials , brass inserts and engineering plastic bends etc.	@	1.75 %		₹ 61.13
	TOTAL				₹ 3,554.53
	Add for testing of joints etc.	@	2.25 %		₹ 79.98
	TOTAL				₹ 3,634.51
	Add for Sundries and contingencies (except on B)	@	3.0%		₹ 72.68
	TOTAL				₹ 3,707.19
	Add for water charges (except on B)	@	1.0%		₹ 24.95
	TOTAL				₹ 3,732.14
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹ 378.02
	Cost for 10.00 mtr pipe length				₹ 4,110.16
	Rate per mtr.				₹ 411.02
	Say				₹ 411.00
19.2	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge. Concealed work including cutting chases and making good the wall etc.				
19.2.3:	2025 (25 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19229	PE-AL-PE Composite pressure pipe 2025 (25 mm OD)				
	Add 60 % for fitting,clamps and wastage etc on (A)	metre	16.00	₹ 140.00	₹ 2,240.00
	(10.00 + 6.00)=16.00 mtr.				
	Making chases upto 7.5 x 7.5 cm. in walls and making good the same				
(B)	Rate as per item no. 19.78 (cutting Chasing & making good)	metre	10.00	₹ 121.20	₹ 1,212.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 3,973.40
	Add for ladders, scaffolding and carriage of all materials , brass inserts and engineering plastic bends etc.	@	1.75 %		₹ 69.53

	TOTAL				₹	4,042.93
	Add for testing of joints etc.	@	2.00 %		₹	80.86
	TOTAL				₹	4,123.79
	Add for Sundries and contingencies (except on B)	@	3.0%		₹	87.35
	TOTAL				₹	4,211.15
	Add for water charges (except on B)	@	1.0%		₹	29.99
	TOTAL				₹	4,241.14
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹	454.37
	Cost for 10.00 mtr pipe length				₹	4,695.51
	Rate per mtr.				₹	469.55
	Say				₹	469.60
19.2	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge. Concealed work including cutting chases and making good the wall etc.					
18.2.4:	2532 (32 mm OD) pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19230	PE-AL-PE Composite pressure pipe 2532 (32 mm OD)					
	Add 60 % for fitting,clamps and wastage etc on (A)	metre	16.00	₹ 175.00	₹	2,800.00
	(10.00 + 6.00)=16.00 mtr.					
	Making chases upto 7.5 x 7.5 cm. in walls and making good the same					
(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹	1,212.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	4,533.40
	Add for ladders, scaffolding and carriage of all materials , brass inserts and engineering plastic bends etc.	@	1.25 %		₹	56.67
	TOTAL				₹	4,590.07
	Add for testing of joints etc.	@	1.75 %		₹	80.33
	TOTAL				₹	4,670.39
	Add for Sundries and contingencies (except on B)	@	3.0%		₹	103.75
	TOTAL				₹	4,774.15
	Add for water charges (except on B)	@	1.0%		₹	35.62
	TOTAL				₹	4,809.77
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹	539.67
	Cost for 10.00 mtr pipe length				₹	5,349.43
	Rate per mtr.				₹	534.94
	Say				₹	534.90
19.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80° C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge.					
	External work					
19.3.1:	1216 (16 mm OD) pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19227	PE-AL-PE Composite pressure pipe 1216 (16 mm OD) pipe					
	Add 25% for fitting and wastage etc. on (A)	Metre	12.50	₹ 90.00	₹	1,125.00

	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.08	₹ 380.00	₹ 30.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.82	₹ 300.00	₹ 246.00
	TOTAL				₹ 1,599.40
	Add for excavation & refilling etc.	@	15%		₹ 239.91
	TOTAL				₹ 1,839.31
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	2.0%		₹ 36.79
	TOTAL				₹ 1,876.10
	Add for testing of joints etc.	@	2.5%		₹ 46.90
	TOTAL				₹ 1,923.00
	Add for Sundries and contingencies	@	3.0%		₹ 57.69
	TOTAL				₹ 1,980.69
	Add for water charges	@	1.0%		₹ 19.81
	TOTAL				₹ 2,000.50
	Add 15% for contractor's profit and overheads	@	15%		₹ 297.10
	Cost for 10.00 mtr pipe length				₹ 2,297.60
	Rate per mtr.				₹ 229.76
	Say				₹ 229.80
19.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge.				
19.3.2	1620 (20 mm OD) pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19228	PE-AL-PE Composite pressure pipe 1620				
	(20 mm OD) pipe				
	Add 25% for fitting and wastage etc. on (A)	Metre	12.50	₹ 110.00	₹ 1,375.00
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.08	₹ 380.00	₹ 30.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.82	₹ 300.00	₹ 246.00
	TOTAL				₹ 1,849.40
	Add for excavation & refilling etc.	@	12%		₹ 221.93
	TOTAL				₹ 2,071.33
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	1.75%		₹ 36.25
	TOTAL				₹ 2,107.58
	Add for testing of joints etc.	@	2.0%		₹ 42.15
	TOTAL				₹ 2,149.73
	Add for Sundries and contingencies	@	3.0%		₹ 64.49
	TOTAL				₹ 2,214.22
	Add for water charges	@	1.0%		₹ 22.14
	TOTAL				₹ 2,236.36
	Add 15% for contractor's profit and overheads	@	15%		₹ 332.13
	Cost for 10.00 mtr pipe length				₹ 2,568.49
	Rate per mtr.				₹ 256.85
	Say				₹ 256.80
19.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge.				
19.3.3.	2025 (25 mm OD) pipe.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19229	PE-AL-PE Composite pressure pipe 2025				
	(25 mm OD) pipe				
	Add 25% for fitting and wastage etc. on (A)	Metre	12.50	₹ 140.00	₹ 1,750.00
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.08	₹ 380.00	₹ 30.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.82	₹ 300.00	₹ 246.00
	TOTAL				₹ 2,224.40
	Add for excavation & refilling etc.	@	10%		₹ 222.44
	TOTAL				₹ 2,446.84
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	1.50%		₹ 36.70
	TOTAL				₹ 2,483.54
	Add for testing of joints etc.	@	1.75%		₹ 43.46
	TOTAL				₹ 2,527.00
	Add for Sundries and contingencies	@	3.0%		₹ 75.81
	TOTAL				₹ 2,602.81
	Add for water charges	@	1.0%		₹ 26.03
	TOTAL				₹ 2,628.84
	Add 15% for contractor's profit and overheads	@	15%		₹ 390.42
	Cost for 10.00 mtr pipe length				₹ 3,019.27
	Rate per mtr.				₹ 301.93
	Say				₹ 301.90
19.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge.				
19.3.4:	2532 (32 mm OD) pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19230	PE-AL-PE Composite pressure pipe 2532				
	(32 mm OD) pipe				
	Add 30% for fitting and wastage etc. on (A)	Metre	13.00	₹ 175.00	₹ 2,275.00
	(10.00 + 3.00)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.08	₹ 380.00	₹ 30.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.82	₹ 300.00	₹ 246.00
	TOTAL				₹ 2,749.40
	Add for excavation & refilling etc.	@	7.0%		₹ 192.46
	TOTAL				₹ 2,941.86
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	1.50%		₹ 44.13
	TOTAL				₹ 2,985.99
	Add for testing of joints etc.	@	2.0%		₹ 59.72
	TOTAL				₹ 3,045.71
	Add for Sundries and contingencies	@	3.0%		₹ 91.37
	TOTAL				₹ 3,137.08
	Add for water charges	@	1.0%		₹ 31.37
	TOTAL				₹ 3,168.45
	Add 15% for contractor's profit and overheads	@	15%		₹ 470.56
	Cost for 10.00 mtr pipe length				₹ 3,639.01
	Rate per mtr.				₹ 363.90
	Say				₹ 363.90

19.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge.				
19.3.5:	3240 (40 mm OD) pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19231	PE-AL-PE Composite pressure pipe 3240 (40 mm OD) pipe				
	Add 30% for fitting and wastage etc. on (A)	Metre	13.00	₹ 260.00	₹ 3,380.00
	(10.00 + 3.00)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.16	₹ 380.00	₹ 60.80
0214	Fitter (2nd Class)	Day	0.75	₹ 300.00	₹ 225.00
0212	Helper	Day	1	₹ 300.00	₹ 300.00
	TOTAL				₹ 3,965.80
	Add for excavation & refilling etc.	@	5.50%		₹ 218.12
	TOTAL				₹ 4,183.92
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	1.25%		₹ 52.30
	TOTAL				₹ 4,236.22
	Add for testing of joints etc.	@	1.50%		₹ 63.54
	TOTAL				₹ 4,299.76
	Add for Sundries and contingencies	@	3.0%		₹ 128.99
	TOTAL				₹ 4,428.75
	Add for water charges	@	1.0%		₹ 44.29
	TOTAL				₹ 4,473.04
	Add 15% for contractor's profit and overheads	@	15%		₹ 664.31
	Cost for 10.00 mtr pipe length				₹ 5,137.35
	Rate per mtr.				₹ 513.74
	Say				₹ 513.70
19.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 800 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge.				
19.3.6:	4050 (50 mm OD) pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19232	PE-AL-PE Composite pressure pipe 4050 (50 mm OD) pipe				
	Add 30% for fitting and wastage etc. on (A)	Metre	13.00	₹ 350.00	₹ 4,550.00
	(10.00 + 3.00)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.75	₹ 300.00	₹ 225.00
0212	Helper	Day	0.75	₹ 300.00	₹ 225.00
	TOTAL				₹ 5,125.40
	Add for excavation & refilling etc.	@	4.25%		₹ 217.83
	TOTAL				₹ 5,343.23
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	1.00%		₹ 53.43
	TOTAL				₹ 5,396.66
	Add for testing of joints etc.	@	1.25%		₹ 67.46
	TOTAL				₹ 5,464.12
	Add for Sundries and contingencies	@	3.0%		₹ 163.92
	TOTAL				₹ 5,628.04
	Add for water charges	@	1.0%		₹ 56.28

	TOTAL				₹	5,684.32
	Add 15% for contractor's profit and overheads	@	15%		₹	844.21
	Cost for 10.00 mtr pipe length				₹	6,528.53
	Rate per mtr.				₹	652.85
	Say				₹	652.90
	PP - R PIPES					
19.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge.					
	Internal work - Exposed on wall					
19.4.1	PN-16 Pipe, 16 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19233	3 layer PP-R pipe (PN-16/SDR 7.4) 16 mm outer dia					
	Add 25 % for fittings and wastage etc. on (A)	Metre	12.50	₹ 38.00	₹	475.00
	(10.00 + 2.50)=12.50 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	0.82	₹ 300.00	₹	246.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	1,044.40
	Add for clamps,wooden plugs,screws,cement,sand & grit etc.	@	4.00%		₹	41.78
	TOTAL				₹	1,086.18
	Add for carriage of all materials & scaffolding ladders etc.	@	3.00%		₹	32.59
	TOTAL				₹	1,118.76
	Add for testing of joints etc.	@	4.0%		₹	44.75
	TOTAL				₹	1,163.51
	Add for Sundries and contingencies	@	3.0%		₹	34.91
	TOTAL				₹	1,198.42
	Add for water charges	@	1.0%		₹	11.98
	TOTAL				₹	1,210.40
	Add 15% for contractor's profit and overheads	@	15%		₹	179.76
	Cost for 10.00 mtr pipe length				₹	1,390.16
	Rate per mtr.				₹	139.02
	Say				₹	139.00
19.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge.					
19.4.2	PN-16 Pipe, 20 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19234	3 layer PP-R pipe (PN-16/SDR 7.4) 20 mm outer dia					
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 58.00	₹	725.00
	(10.00 + 2.50)=12.50 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	0.82	₹ 300.00	₹	246.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	1,294.40
	Add for clamps,wooden plugs,screws,cement,sand & grit etc.	@	3.00%		₹	38.83
	TOTAL				₹	1,333.23
	Add for carriage of all materials & scaffolding ladders etc.	@	2.50%		₹	33.33

	TOTAL				₹	1,366.56
	Add for testing of joints etc.	@	3.0%		₹	41.00
	TOTAL				₹	1,407.56
	Add for Sundries and contingencies	@	3.0%		₹	42.23
	TOTAL				₹	1,449.79
	Add for water charges	@	1.0%		₹	14.50
	TOTAL				₹	1,464.28
	Add 15% for contractor's profit and overheads	@	15%		₹	217.47
	Cost for 10.00 mtr pipe length				₹	1,681.75
	Rate per mtr.				₹	168.18
	Say				₹	168.20
19.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge.					
19.4.3	PN-16 Pipe, 25 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19235	3 layer PP-R pipe (PN-16/SDR 7.4) 25 mm outer dia					
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 75.00	₹	937.50
	(10.00 + 2.50)=12.50 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	0.98	₹ 300.00	₹	294.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	1,554.90
	Add for clamps,wooden plugs,screws,cement,sand & grit etc.	@	2.50%		₹	38.87
	TOTAL				₹	1,593.77
	Add for carriage of all materials & scaffolding ladders etc.	@	2.00%		₹	31.88
	TOTAL				₹	1,625.65
	Add for testing of joints etc.	@	2.50%		₹	40.64
	TOTAL				₹	1,666.29
	Add for Sundries and contingencies	@	3.0%		₹	49.99
	TOTAL				₹	1,716.28
	Add for water charges	@	1.0%		₹	17.16
	TOTAL				₹	1,733.44
	Add 15% for contractor's profit and overheads	@	15%		₹	257.44
	Cost for 10.00 mtr pipe length				₹	1,990.88
	Rate per mtr.				₹	199.09
	Say				₹	199.10
19.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge.					
19.4.4	PN-16 Pipe, 32 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19236	3 layer PP-R pipe (PN-16/SDR 7.4) 32 mm outer dia					
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 112.00	₹	1,456.00
	(10.00 + 3.0)=13.0 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	0.98	₹ 300.00	₹	294.00
0212	Helper	Day	0.98	₹ 300.00	₹	294.00
	TOTAL				₹	2,169.40
	Add for clamps,wooden plugs,screws,cement,sand & grit etc.	@	2.00%		₹	43.39

	TOTAL				₹	2,212.79
	Add for carriage of all materials & scaffolding ladders etc.	@	2.00%		₹	44.26
	TOTAL				₹	2,257.04
	Add for testing of joints etc.	@	2.50%		₹	56.43
	TOTAL				₹	2,313.47
	Add for Sundries and contingencies	@	3.0%		₹	69.40
	TOTAL				₹	2,382.87
	Add for water charges	@	1.0%		₹	23.83
	TOTAL				₹	2,406.70
	Add 15% for contractor's profit and overheads	@	15%		₹	357.43
	Cost for 10.00 mtr pipe length				₹	2,764.13
	Rate per mtr.				₹	276.41
	Say				₹	276.40
19.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge.					
19.4.5	PN-16 Pipe, 40 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19237	3 layer PP-R pipe (PN-16/SDR 7.4) 40 mm outer dia					
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 150.00	₹	1,950.00
	(10.00 + 3.0)=13.0 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	1.31	₹ 300.00	₹	393.00
0212	Helper	Day	1.31	₹ 300.00	₹	393.00
	TOTAL				₹	2,861.40
	Add for clamps,wooden plugs,screws,cement,sand & grit etc.	@	1.50%		₹	42.92
	TOTAL				₹	2,904.32
	Add for carriage of all materials & scaffolding ladders etc.	@	1.50%		₹	43.56
	TOTAL				₹	2,947.89
	Add for testing of joints etc.	@	2.00%		₹	58.96
	TOTAL				₹	3,006.84
	Add for Sundries and contingencies	@	3.0%		₹	90.21
	TOTAL				₹	3,097.05
	Add for water charges	@	1.0%		₹	30.97
	TOTAL				₹	3,128.02
	Add 15% for contractor's profit and overheads	@	15%		₹	464.56
	Cost for 10.00 mtr pipe length				₹	3,592.58
	Rate per mtr.				₹	359.26
	Say				₹	359.30
19.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge.					
19.4.6	PN-16 Pipe, 50 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19238	3 layer PP-R pipe (PN-16/SDR 7.4) 50 mm outer dia					
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 260.00	₹	3,380.00
	(10.00 + 3.0)=13.0 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	1.31	₹ 300.00	₹	393.00
0212	Helper	Day	1.31	₹ 300.00	₹	393.00

	TOTAL				₹	4,291.40
	Add for clamps,wooden plugs,screws,cement,sand & grit etc.	@	1.20%		₹	51.50
	TOTAL				₹	4,342.90
	Add for carriage of all materials & scaffolding ladders etc.	@	1.20%		₹	52.11
	TOTAL				₹	4,395.01
	Add for testing of joints etc.	@	1.50%		₹	65.93
	TOTAL				₹	4,460.94
	Add for Sundries and contingencies	@	3.0%		₹	133.83
	TOTAL				₹	4,594.76
	Add for water charges	@	1.0%		₹	45.95
	TOTAL				₹	4,640.71
	Add 15% for contractor's profit and overheads	@	15%		₹	689.21
	Cost for 10.00 mtr pipe length				₹	5,329.93
	Rate per mtr.				₹	532.99
	Say				₹	533.00
19.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.					
	Concealed work including cutting chases and making good the walls etc.					
19.5.1	PN- 16 Pipe, 16 mm OD					
Code	Description		Unit	Quantity	Rate	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19233	3 layer PP-R pipe (PN-16/SDR 7.4) 16 mm					
	Add 60 % for fitting and wastage etc. on (A)	Metre	16.00	₹ 38.00	₹	608.00
	(10.00 + 6.0)=16.0 mtr.					
	Making chase upto 7.5 x 7.5 cm. in walls and making good the same					
(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹	1,212.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	2,341.40
	Add for carriage of all materials & scaffolding ladders etc.	@	4.0%		₹	93.66
	TOTAL				₹	2,435.06
	Add for testing of joints etc.	@	3.50%		₹	85.23
	TOTAL				₹	2,520.28
	Add for Sundries and contingencies (except on B)	@	3.0%		₹	39.25
	TOTAL				₹	2,559.53
	Add for water charges (except on B)	@	1.0%		₹	13.48
	TOTAL				₹	2,573.01
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹	204.15
	Cost for 10.00 mtr pipe length				₹	2,777.16
	Rate per mtr.				₹	277.72
	Say				₹	277.70
19.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.					
19.5.2	PN- 16 Pipe, 20 mm OD					

Code	Description		Unit	Quantity	Rate
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19234	3 layer PP-R pipe (PN-16/SDR 7.4) 20 mm				
	Add 60 % for fitting and wastage etc. on (A)	Metre	16.00	₹ 58.00	₹ 928.00
	(10.00 + 6.0)=16.0 mtr.				
	Making chase upto 7.5 x 7.5 cm. in walls and making good the same				
(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹ 1,212.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 2,661.40
	Add for carriage of all materials & scaffolding ladders etc.	@	2.0%		₹ 53.23
	TOTAL				₹ 2,714.63
	Add for testing of joints etc.	@	3.50%		₹ 95.01
	TOTAL				₹ 2,809.64
	Add for Sundries and contingencies (except on B)	@	3.0%		₹ 47.93
	TOTAL				₹ 2,857.57
	Add for water charges (except on B)	@	1.0%		₹ 16.46
	TOTAL				₹ 2,874.02
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹ 249.30
	Cost for 10.00 mtr pipe length				₹ 3,123.33
	Rate per mtr.				₹ 312.33
	Say				₹ 312.30
19.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.				
19.5.3	PN- 16 Pipe, 25 mm OD				
Code	Description		Unit	Quantity	Rate
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19235	3 layer PP-R pipe (PN-16/SDR 7.4) 25 mm				
	Add 60 % for fitting and wastage etc. on (A)	Metre	16.00	₹ 75.00	₹ 1,200.00
	(10.00 + 6.0)=16.0 mtr.				
	Making chase upto 7.5 x 7.5 cm. in walls and making good the same				
(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹ 1,212.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 2,933.40
	Add for carriage of all materials & scaffolding ladders etc.	@	2.0%		₹ 58.67
	TOTAL				₹ 2,992.07
	Add for testing of joints etc.	@	2.50%		₹ 74.80
	TOTAL				₹ 3,066.87
	Add for Sundries and contingencies (except on B)	@	3.0%		₹ 55.65
	TOTAL				₹ 3,122.52
	Add for water charges (except on B)	@	1.0%		₹ 19.11
	TOTAL				₹ 3,141.62
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹ 289.44
	Cost for 10.00 mtr pipe length				₹ 3,431.06
	Rate per mtr.				₹ 343.11

	Say				₹	343.10
19.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.					
19.5.4	PN- 16 Pipe, 32 mm OD					
Code	Description		Unit	Quantity		Rate
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19236	3 layer PP-R pipe (PN-16/SDR 7.4) 32 mm					
	Add 60 % for fitting and wastage etc. on (A)	Metre	16.00	₹ 112.00	₹	1,792.00
	(10.00 + 6.0)=16.0 mtr.					
	Making chase upto 7.5 x 7.5 cm. in walls and making good the same					
(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹	1,212.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹	125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	3,525.40
	Add for carriage of all materials & scaffolding ladders etc.	@	1.5%		₹	52.88
	TOTAL				₹	3,578.28
	Add for testing of joints etc.	@	2.0%		₹	71.57
	TOTAL				₹	3,649.85
	Add for Sundries and contingencies (except on B)	@	3.0%		₹	73.14
	TOTAL				₹	3,722.98
	Add for water charges (except on B)	@	1.0%		₹	25.11
	TOTAL				₹	3,748.09
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹	380.41
	Cost for 10.00 mtr pipe length				₹	4,128.51
	Rate per mtr.				₹	412.85
	Say				₹	412.90
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.					
	External work					
19.6.1 :	PN-16 Pipe, 16 mm OD					
Code	Description	Unit	Quantity	Rate		Amount
	Details of cost for 10 metre(A)					
	MATERIALS					
19233	3 layer PP-R pipe (PN-16/SDR 7.4) 16 mm Outer dia					
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 38.00	₹	475.00
	(10.00 + 2.50)=12.50 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.08	₹ 380.00	₹	30.40
0212	Helper	Day	0.16	₹ 300.00	₹	48.00
	for excavation & refilling etc.					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	949.40
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	4.00%		₹	37.98
	TOTAL				₹	987.38
	Add for testing of joints etc.	@	7.0 %		₹	69.12

	TOTAL				₹	1,056.49
	Add for Sundries and contingencies	@	3.0%		₹	31.69
	TOTAL				₹	1,088.19
	Add for water charges	@	1.0%		₹	10.88
	TOTAL				₹	1,099.07
	Add 15% for contractor's profit and overheads	@	15%		₹	164.86
	Cost for 10.00 mtr pipe length				₹	1,263.93
	Rate per mtr.				₹	126.39
	Say				₹	126.40
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.					
19.6.2 :	PN-16 Pipe, 20 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre(A)					
	MATERIALS					
19234	3 layer PP-R pipe (PN-16/SDR 7.4) 20 mm Outer dia					
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 58.00	₹	725.00
	(10.00 + 2.50)=12.50 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.08	₹ 380.00	₹	30.40
0212	Helper	Day	0.16	₹ 300.00	₹	48.00
	for excavation & refilling etc.					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	1,199.40
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	3.50%		₹	41.98
	TOTAL				₹	1,241.38
	Add for testing of joints etc.	@	6.0 %		₹	74.48
	TOTAL				₹	1,315.86
	Add for Sundries and contingencies	@	3.0%		₹	39.48
	TOTAL				₹	1,355.34
	Add for water charges	@	1.0%		₹	13.55
	TOTAL				₹	1,368.89
	Add 15% for contractor's profit and overheads	@	15%		₹	205.33
	Cost for 10.00 mtr pipe length				₹	1,574.22
	Rate per mtr.				₹	157.42
	Say				₹	157.40
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.					
19.6.3 :	PN-16 Pipe, 25 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre(A)					
	MATERIALS					
19235	3 layer PP-R pipe (PN-16/SDR 7.4) 25 mm Outer dia					
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 75.00	₹	937.50
	(10.00 + 2.50)=12.50 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.10	₹ 380.00	₹	38.00
0212	Helper	Day	0.20	₹ 300.00	₹	60.00
	for excavation & refilling etc.					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	1,431.50
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	3.0%		₹	42.95
	TOTAL				₹	1,474.45

	Add for testing of joints etc.	@	5.0 %		₹	73.72
	TOTAL				₹	1,548.17
	Add for Sundries and contingencies	@	3.0%		₹	46.45
	TOTAL				₹	1,594.61
	Add for water charges	@	1.0%		₹	15.95
	TOTAL				₹	1,610.56
	Add 15% for contractor's profit and overheads	@	15%		₹	241.58
	Cost for 10.00 mtr pipe length				₹	1,852.14
	Rate per mtr.				₹	185.21
	Say				₹	185.20
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.					
19.6.4 :	PN-16 Pipe, 32 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre(A)					
	MATERIALS					
19236	3 layer PP-R pipe (PN-16/SDR 7.4) 32 mm Outer dia					
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 112.00	₹	1,400.00
	(10.00 + 2.50)=12.50 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.12	₹ 380.00	₹	45.60
0212	Helper	Day	0.25	₹ 300.00	₹	75.00
	for excavation & refilling etc.					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	1,916.60
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	2.50%		₹	47.92
	TOTAL				₹	1,964.52
	Add for testing of joints etc.	@	4.0 %		₹	78.58
	TOTAL				₹	2,043.10
	Add for Sundries and contingencies	@	3.0%		₹	61.29
	TOTAL				₹	2,104.39
	Add for water charges	@	1.0%		₹	21.04
	TOTAL				₹	2,125.43
	Add 15% for contractor's profit and overheads	@	15%		₹	318.81
	Cost for 10.00 mtr pipe length				₹	2,444.25
	Rate per mtr.				₹	244.42
	Say				₹	244.40
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.					
19.6.5 :	PN-16 Pipe, 40 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre(A)					
	MATERIALS					
19237	3 layer PP-R pipe (PN-16/SDR 7.4) 40 mm Outer dia					
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 150.00	₹	1,950.00
	(10.00 + 3.0)=13.00 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.16	₹ 380.00	₹	60.80
0212	Helper	Day	0.33	₹ 300.00	₹	99.00
	for excavation & refilling etc.					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	2,505.80
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	3.0%		₹	75.17

	TOTAL				₹	2,580.97
	Add for testing of joints etc.	@	3.0 %		₹	77.43
	TOTAL				₹	2,658.40
	Add for Sundries and contingencies	@	3.0%		₹	79.75
	TOTAL				₹	2,738.16
	Add for water charges	@	1.0%		₹	27.38
	TOTAL				₹	2,765.54
	Add 15% for contractor's profit and overheads	@	15%		₹	414.83
	Cost for 10.00 mtr pipe length				₹	3,180.37
	Rate per mtr.				₹	318.04
	Say				₹	318.00
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.					
19.6.6:	PN-16 Pipe, 50 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre(A)					
	MATERIALS					
19238	3 layer PP-R pipe (PN-16/SDR 7.4) 50 mm Outer dia					
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 260.00	₹	3,380.00
	(10.00 + 3.0)=13.00 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.16	₹ 380.00	₹	60.80
0212	Helper	Day	0.33	₹ 300.00	₹	99.00
	for excavation & refilling etc.					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	3,935.80
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	2.50%		₹	98.40
	TOTAL				₹	4,034.20
	Add for testing of joints etc.	@	2.50 %		₹	100.85
	TOTAL				₹	4,135.05
	Add for Sundries and contingencies	@	3.0%		₹	124.05
	TOTAL				₹	4,259.10
	Add for water charges	@	1.0%		₹	42.59
	TOTAL				₹	4,301.69
	Add 15% for contractor's profit and overheads	@	15%		₹	645.25
	Cost for 10.00 mtr pipe length				₹	4,946.95
	Rate per mtr.				₹	494.69
	Say				₹	494.70
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.					
19.6.7:	PN-16 Pipe, 63 mm OD					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre(A)					
	MATERIALS					
19239	3 layer PP-R pipe (PN-16/SDR 7.4) 63 mm Outer dia					
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 700.00	₹	9,100.00
	(10.00 + 3.0)=13.00 mtr.					
	LABOUR					
0215	Fitter (grade-1)	Day	0.16	₹ 380.00	₹	60.80
0212	Helper	Day	0.33	₹ 300.00	₹	99.00
	for excavation & refilling etc.					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	9,655.80

	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	2.00%		₹ 193.12
	TOTAL				₹ 9,848.92
	Add for testing of joints etc.	@	2.00 %		₹ 196.98
	TOTAL				₹ 10,045.89
	Add for Sundries and contingencies	@	3.0%		₹ 301.38
	TOTAL				₹ 10,347.27
	Add for water charges	@	1.0%		₹ 103.47
	TOTAL				₹ 10,450.74
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,567.61
	Cost for 10.00 mtr pipe length				₹ 12,018.36
	Rate per mtr.				₹ 1,201.84
	Say				₹ 1,201.80
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.6.8	PN-16 Pipe, 75 mm OD				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19240	3 layer PP-R pipe (PN-16/SDR 7.4) 75 mm Outer dia				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 790.00	₹ 10,270.00
	(10.00 + 3.0)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.25	₹ 380.00	₹ 95.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 10,959.00
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	1.50%		₹ 164.39
	TOTAL				₹ 11,123.39
	Add for testing of joints etc.	@	1.50 %		₹ 166.85
	TOTAL				₹ 11,290.24
	Add for Sundries and contingencies	@	3.0%		₹ 338.71
	TOTAL				₹ 11,628.94
	Add for water charges	@	1.0%		₹ 116.29
	TOTAL				₹ 11,745.23
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,761.78
	Cost for 10.00 mtr pipe length				₹ 13,507.02
	Rate per mtr.				₹ 1,350.70
	Say				₹ 1,350.70
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.6.9	PN-16 Pipe, 90 mm OD				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19241	3 layer PP-R pipe (PN-16/SDR 7.4) 90 mm Outer dia				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 950.00	₹ 12,350.00
	(10.00 + 3.0)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.37	₹ 380.00	₹ 140.60
0212	Helper	Day	0.97	₹ 300.00	₹ 291.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.80	₹ 300.00	₹ 240.00
0212	Helper	Day	0.80	₹ 300.00	₹ 240.00

	TOTAL				₹ 13,261.60
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	1.0%		₹ 132.62
	TOTAL				₹ 13,394.22
	Add for testing of joints etc.	@	1.0 %		₹ 133.94
	TOTAL				₹ 13,528.16
	Add for Sundries and contingencies	@	3.0%		₹ 405.84
	TOTAL				₹ 13,934.00
	Add for water charges	@	1.0%		₹ 139.34
	TOTAL				₹ 14,073.34
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,111.00
	Cost for 10.00 mtr pipe length				₹ 16,184.34
	Rate per mtr.				₹ 1,618.43
	Say				₹ 1,618.40
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.6.10	PN-10 Pipe, 110 mm OD(SDR-11)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19242	3 layer PP-R pipe (PN-10/SDR -11) 110 mm Outer dia				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 1,050.00	₹ 13,650.00
	(10.00 + 3.0)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.37	₹ 380.00	₹ 140.60
0212	Helper	Day	0.97	₹ 300.00	₹ 291.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.80	₹ 300.00	₹ 240.00
0212	Helper	Day	0.80	₹ 300.00	₹ 240.00
	TOTAL				₹ 14,561.60
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	1.0%		₹ 145.62
	TOTAL				₹ 14,707.22
	Add for testing of joints etc.	@	1.0 %		₹ 147.07
	TOTAL				₹ 14,854.29
	Add for Sundries and contingencies	@	3.0%		₹ 445.63
	TOTAL				₹ 15,299.92
	Add for water charges	@	1.0%		₹ 153.00
	TOTAL				₹ 15,452.92
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,317.94
	Cost for 10.00 mtr pipe length				₹ 17,770.85
	Rate per mtr.				₹ 1,777.09
	Say				₹ 1,777.10
19.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.6.11	PN-10 Pipe, 160 mm OD(SDR-11)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19243	3 layer PP-R pipe (PN-10/SDR -11) 160 mm Outer dia				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 1,750.00	₹ 22,750.00
	(10.00 + 3.0)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.58	₹ 380.00	₹ 220.40
0212	Helper	Day	1.54	₹ 300.00	₹ 462.00
	for excavation & refilling etc.				
0203	Beldar	Day	1.28	₹ 300.00	₹ 384.00

0212	Helper	Day	1.20	₹ 300.00	₹ 360.00
	TOTAL				₹ 24,176.40
	Add for carriage of all materials, cost of plastic bends, pipe inserts etc.	@	0.50%		₹ 120.88
	TOTAL				₹ 24,297.28
	Add for testing of joints etc.	@	0.50%		₹ 121.49
	TOTAL				₹ 24,418.77
	Add for Sundries and contingencies	@	3.0%		₹ 732.56
	TOTAL				₹ 25,151.33
	Add for water charges	@	1.0%		₹ 251.51
	TOTAL				₹ 25,402.84
	Add 15% for contractor's profit and overheads	@	15%		₹ 3,810.43
	Cost for 10.00 mtr pipe length				₹ 29,213.27
	Rate per mtr.				₹ 2,921.33
	Say				₹ 2,921.30
19.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Internal work Exposed on wall				
19.7.1:	15 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19244	15 mm outer dia CPVC pipe ,				
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 45.00	₹ 562.50
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.82	₹ 300.00	₹ 246.00
0212	Helper	Day	0.76	₹ 300.00	₹ 228.00
	TOTAL				₹ 1,161.90
	Add for CPVC Solvent cement etc.	@	5.00%		₹ 58.10
	TOTAL				₹ 1,220.00
	Add for carriage of all materials & scaffolding ladders, cost of wooden plugs,screws,clamps, cement , sand etc.	@	6.00%		₹ 73.20
	TOTAL				₹ 1,293.19
	Add for testing of joints etc.	@	4.00%		₹ 51.73
	TOTAL				₹ 1,344.92
	Add for Sundries and contingencies	@	3.0%		₹ 40.35
	TOTAL				₹ 1,385.27
	Add for water charges	@	1.0%		₹ 13.85
	TOTAL				₹ 1,399.12
	Add 15% for contractor's profit and overheads	@	15%		₹ 80.95
	Cost for 10.00 mtr pipe length				₹ 1,480.07
	Rate per mtr.				₹ 148.01
	Say				₹ 148.00
19.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Internal work Exposed on wall				
19.7.2:	20 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19245	20 mm outer dia CPVC pipe ,				
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 65.00	₹ 812.50

	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.98	₹ 300.00	₹ 294.00
0212	Helper	Day	0.76	₹ 300.00	₹ 228.00
	TOTAL				₹ 1,459.90
	Add for CPVC Solvent cement etc.	@	5.00%		₹ 73.00
	TOTAL				₹ 1,532.90
	Add for carriage of all materials & scaffolding ladders, cost of wooden plugs,screws,clamps, cement , sand etc.	@	5.00%		₹ 76.64
	TOTAL				₹ 1,609.54
	Add for testing of joints etc.	@	4.00%		₹ 64.38
	TOTAL				₹ 1,673.92
	Add for Sundries and contingencies	@	3.0%		₹ 50.22
	TOTAL				₹ 1,724.14
	Add for water charges	@	1.0%		₹ 17.24
	TOTAL				₹ 1,741.38
	Add 15% for contractor's profit and overheads	@	15%		₹ 7.04
	Cost for 10.00 mtr pipe length				₹ 1,748.42
	Rate per mtr.				₹ 174.84
	Say				₹ 174.80
19.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Internal work Exposed on wall				
19.7.3:	25 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19246	25 mm outer dia CPVC pipe ,				
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 85.00	₹ 1,062.50
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	1.00	₹ 300.00	₹ 300.00
0212	Helper	Day	0.76	₹ 300.00	₹ 228.00
	TOTAL				₹ 1,715.90
	Add for CPVC Solvent cement etc.	@	4.00%		₹ 68.64
	TOTAL				₹ 1,784.54
	Add for carriage of all materials & scaffolding ladders, cost of wooden plugs,screws,clamps, cement , sand etc.	@	4.50%		₹ 80.30
	TOTAL				₹ 1,864.84
	Add for testing of joints etc.	@	3.50%		₹ 65.27
	TOTAL				₹ 1,930.11
	Add for Sundries and contingencies	@	3.0%		₹ 57.90
	TOTAL				₹ 1,988.01
	Add for water charges	@	1.0%		₹ 19.88
	TOTAL				₹ 2,007.89
	Add 15% for contractor's profit and overheads	@	15%		₹ 310.70
	Cost for 10.00 mtr pipe length				₹ 2,318.59
	Rate per mtr.				₹ 231.86
	Say				₹ 231.90
19.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Internal work Exposed on wall				

19.7.4:	32 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19247	32 mm outer dia CPVC pipe ,				
	Add 30.00 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 125.00	₹ 1,625.00
	(10.00 + 3.0)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	1.00	₹ 300.00	₹ 300.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 2,350.40
	Add for CPVC Solvent cement etc.	@	4.00%		₹ 94.02
	TOTAL				₹ 2,444.42
	Add for carriage of all materials & scaffolding ladders, cost of wooden plugs,screws,clamps, cement , sand etc.	@	3.50%		₹ 85.55
	TOTAL				₹ 2,529.97
	Add for testing of joints etc.	@	3.00%		₹ 75.90
	TOTAL				₹ 2,605.87
	Add for Sundries and contingencies	@	3.0%		₹ 78.18
	TOTAL				₹ 2,684.05
	Add for water charges	@	1.0%		₹ 26.84
	TOTAL				₹ 2,710.89
	Add 15% for contractor's profit and overheads	@	15%		₹ 333.66
	Cost for 10.00 mtr pipe length				₹ 3,044.55
	Rate per mtr.				₹ 304.45
	Say				₹ 304.50
19.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Internal work Exposed on wall				
19.7.5:	40 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19248	40 mm outer dia CPVC pipe ,				
	Add 30.00 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 165.00	₹ 2,145.00
	(10.00 + 3.0)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.40	₹ 380.00	₹ 152.00
0214	Fitter (2nd Class)	Day	1.40	₹ 300.00	₹ 420.00
0212	Helper	Day	1.40	₹ 300.00	₹ 420.00
	TOTAL				₹ 3,137.00
	Add for CPVC Solvent cement etc.	@	3.50%		₹ 109.80
	TOTAL				₹ 3,246.80
	Add for carriage of all materials & scaffolding ladders, cost of wooden plugs,screws,clamps, cement , sand etc.	@	3.00%		₹ 97.40
	TOTAL				₹ 3,344.20
	Add for testing of joints etc.	@	2.50%		₹ 83.60
	TOTAL				₹ 3,427.80
	Add for Sundries and contingencies	@	3.0%		₹ 102.83
	TOTAL				₹ 3,530.64
	Add for water charges	@	1.0%		₹ 35.31
	TOTAL				₹ 3,565.94
	Add 15% for contractor's profit and overheads	@	15%		₹ 36.90
	Cost for 10.00 mtr pipe length				₹ 3,602.84
	Rate per mtr.				₹ 360.28
	Say				₹ 360.30

19.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Internal work Exposed on wall				
19.7.6	50 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19249	50 mm outer dia CPVC pipe ,				
	Add 30.00 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 285.00	₹ 3,705.00
	(10.00 + 3.0)=13.00 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.50	₹ 380.00	₹ 190.00
0214	Fitter (2nd Class)	Day	1.60	₹ 300.00	₹ 480.00
0212	Helper	Day	1.60	₹ 300.00	₹ 480.00
	TOTAL				₹ 4,855.00
	Add for CPVC Solvent cement etc.	@	3.00%		₹ 145.65
	TOTAL				₹ 5,000.65
	Add for carriage of all materials & scaffolding ladders, cost of wooden plugs,screws,clamps, cement , sand etc.	@	2.50%		₹ 125.02
	TOTAL				₹ 5,125.67
	Add for testing of joints etc.	@	2.0%		₹ 102.51
	TOTAL				₹ 5,228.18
	Add for Sundries and contingencies	@	3.0%		₹ 156.85
	TOTAL				₹ 5,385.02
	Add for water charges	@	1.0%		₹ 53.85
	TOTAL				₹ 5,438.88
	Add 15% for contractor's profit and overheads	@	15%		₹ -
	Cost for 10.00 mtr pipe length				₹ 5,438.88
	Rate per mtr.				₹ 543.89
	Say				₹ 543.90
19.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.				
	Concealed work including cutting chases and making good the walls etc.				
19.8.1:	15 mm nominal outer dia .Pipes.				
Code	Description		Unit	Quantity	Rate
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19244	15 mm outer dia CPVC Pipe (A)				
	Add 30.00 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 45.00	₹ 585.00
	(10.00 + 3.0)=13.00 mtr.				
	Making chase upto 7.5 x 7.5 cm. in walls and making good the same				
(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹ 1,212.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 2,318.40
	Add for CPVC Solvent cement etc.	@	4.00%		₹ 92.74
	TOTAL				₹ 2,411.14
	Add for carriage of all materials & scaffolding ladders etc.	@	1.50%		₹ 36.17
	TOTAL				₹ 2,447.30

	Add for testing of joints etc.	@	3.0%		₹	73.42
	TOTAL				₹	2,520.72
	Add for Sundries and contingencies (except on B)	@	3.0%		₹	39.26
	TOTAL				₹	2,559.98
	Add for water charges (except on B)	@	1.0%		₹	13.48
	TOTAL				₹	2,573.46
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹	204.22
	Cost for 10.00 mtr pipe length				₹	2,777.68
	Rate per mtr.				₹	277.77
	Say				₹	277.80
19.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.					
19.8.2:	20 mm nominal outer dia .Pipes.					
Code	Description		Unit	Quantity	Rate	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19245	20 mm outer dia CPVC Pipe (A)					
	Add 30.00 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 65.00	₹	845.00
	(10.00 + 3.0)=13.00 mtr.					
	Making chase upto 7.5 x 7.5 cm. in walls and making good the same					
(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹	1,212.00
	LABOUR					
0215	Fitter (grade-1)	Day	0.40	₹ 380.00	₹	152.00
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹	198.00
0212	Helper	Day	0.66	₹ 300.00	₹	198.00
	TOTAL				₹	2,605.00
	Add for CPVC Solvent cement etc.	@	4.00%		₹	104.20
	TOTAL				₹	2,709.20
	Add for carriage of all materials & scaffolding ladders etc.	@	1.50%		₹	40.64
	TOTAL				₹	2,749.84
	Add for testing of joints etc.	@	3.0%		₹	82.50
	TOTAL				₹	2,832.33
	Add for Sundries and contingencies (except on B)	@	3.0%		₹	48.61
	TOTAL				₹	2,880.94
	Add for water charges (except on B)	@	1.0%		₹	16.69
	TOTAL				₹	2,897.63
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹	252.84
	Cost for 10.00 mtr pipe length				₹	3,150.48
	Rate per mtr.				₹	315.05
	Say				₹	315.00
19.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.					
19.8.3:	25 mm nominal outer dia .Pipes.					
Code	Description		Unit	Quantity	Rate	
	Details of cost for 10.00 metre (A)					
	MATERIALS					
19246	25 mm outer dia CPVC Pipe (A)					
	Add 30.00 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 85.00	₹	1,105.00
	(10.00 + 3.0)=13.00 mtr.					
	Making chase upto 7.5 x 7.5 cm. in walls and making good the same					

(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹ 1,212.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.50	₹ 380.00	₹ 190.00
0214	Fitter (2nd Class)	Day	0.70	₹ 300.00	₹ 210.00
0212	Helper	Day	0.70	₹ 300.00	₹ 210.00
	TOTAL				₹ 2,927.00
	Add for CPVC Solvent cement etc.	@	3.00%		₹ 87.81
	TOTAL				₹ 3,014.81
	Add for carriage of all materials & scaffolding ladders etc.	@	1.25%		₹ 37.69
	TOTAL				₹ 3,052.50
	Add for testing of joints etc.	@	2.50%		₹ 76.31
	TOTAL				₹ 3,128.81
	Add for Sundries and contingencies (except on B)	@	3.0%		₹ 57.50
	TOTAL				₹ 3,186.31
	Add for water charges (except on B)	@	1.0%		₹ 19.74
	TOTAL				₹ 3,206.05
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹ 299.11
	Cost for 10.00 mtr pipe length				₹ 3,505.16
	Rate per mtr.				₹ 350.52
	Say				₹ 350.50
19.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.				
19.8.4:	32 mm nominal outer dia .Pipes.				
Code	Description		Unit	Quantity	Rate
	Details of cost for 10.00 metre (A)				
	MATERIALS				
19247	32 mm outer dia CPVC Pipe (A)				
	Add 30.00 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 125.00	₹ 1,625.00
	(10.00 + 3.0)=13.00 mtr.				
	Making chase upto 7.5 x 7.5 cm. in walls and making good the same				
(B)	Rate as per item no. 19.78 (cutting Chasing & making good the same)	metre	10.00	₹ 121.20	₹ 1,212.00
	LABOUR				
0215	Fitter (grade-1)	Day	0.60	₹ 380.00	₹ 228.00
0214	Fitter (2nd Class)	Day	0.80	₹ 300.00	₹ 240.00
0212	Helper	Day	0.80	₹ 300.00	₹ 240.00
	TOTAL				₹ 3,545.00
	Add for CPVC Solvent cement etc.	@	3.00%		₹ 106.35
	TOTAL				₹ 3,651.35
	Add for carriage of all materials & scaffolding ladders etc.	@	1.0%		₹ 36.51
	TOTAL				₹ 3,687.86
	Add for testing of joints etc.	@	2.50%		₹ 92.20
	TOTAL				₹ 3,780.06
	Add for Sundries and contingencies (except on B)	@	3.0%		₹ 77.04
	TOTAL				₹ 3,857.10
	Add for water charges (except on B)	@	1.0%		₹ 26.45
	TOTAL				₹ 3,883.55
	Add 15% for contractor's profit and overheads (except on B)	@	15%		₹ 400.73
	Cost for 10.00 mtr pipe length				₹ 4,284.29
	Rate per mtr.				₹ 428.43
	Say				₹ 428.40

19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
	External work				
19.9.1	15 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19244	15 mm outer dia CPVC pipe				
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 45.00	₹ 562.50
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.08	₹ 380.00	₹ 30.40
0212	Helper	Day	0.16	₹ 300.00	₹ 48.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 1,036.90
	Add for carriage of all materials etc.	@	4.0%		₹ 41.48
	TOTAL				₹ 1,078.38
	Add for testing of joints etc.	@	7.0 %		₹ 75.49
	TOTAL				₹ 1,153.86
	Add for Sundries and contingencies	@	3.0%		₹ 34.62
	TOTAL				₹ 1,188.48
	Add for water charges	@	1.0%		₹ 11.88
	TOTAL				₹ 1,200.36
	Add 15% for contractor's profit and overheads	@	15%		₹ 180.05
	Cost for 10.00 mtr pipe length				₹ 1,380.42
	Rate per mtr.				₹ 138.04
	Say				₹ 138.00
19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.2	20 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19245	20 mm outer dia CPVC pipe				
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 65.00	₹ 812.50
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.08	₹ 380.00	₹ 30.40
0212	Helper	Day	0.16	₹ 300.00	₹ 48.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 1,286.90
	Add for carriage of all materials etc.	@	3.5%		₹ 45.04
	TOTAL				₹ 1,331.94
	Add for testing of joints etc.	@	6.0 %		₹ 79.92
	TOTAL				₹ 1,411.86
	Add for Sundries and contingencies	@	3.0%		₹ 42.36
	TOTAL				₹ 1,454.21
	Add for water charges	@	1.0%		₹ 14.54
	TOTAL				₹ 1,468.76
	Add 15% for contractor's profit and overheads	@	15%		₹ 220.31
	Cost for 10.00 mtr pipe length				₹ 1,689.07
	Rate per mtr.				₹ 168.91
	Say				₹ 168.90

19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.3	25 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19246	25 mm outer dia CPVC pipe				
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 85.00	₹ 1,062.50
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.12	₹ 380.00	₹ 45.60
0212	Helper	Day	0.25	₹ 300.00	₹ 75.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 1,579.10
	Add for carriage of all materials etc.	@	2.5%		₹ 39.48
	TOTAL				₹ 1,618.58
	Add for testing of joints etc.	@	4.50 %		₹ 72.84
	TOTAL				₹ 1,691.41
	Add for Sundries and contingencies	@	3.0%		₹ 50.74
	TOTAL				₹ 1,742.16
	Add for water charges	@	1.0%		₹ 17.42
	TOTAL				₹ 1,759.58
	Add 15% for contractor's profit and overheads	@	15%		₹ 263.94
	Cost for 10.00 mtr pipe length				₹ 2,023.51
	Rate per mtr.				₹ 202.35
	Say				₹ 202.40
19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.4	32 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19247	32 mm outer dia CPVC pipe				
	Add 25 % for fitting and wastage etc. on (A)	Metre	12.50	₹ 125.00	₹ 1,562.50
	(10.00 + 2.50)=12.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.12	₹ 380.00	₹ 45.60
0212	Helper	Day	0.25	₹ 300.00	₹ 75.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 2,079.10
	Add for carriage of all materials etc.	@	2.0%		₹ 41.58
	TOTAL				₹ 2,120.68
	Add for testing of joints etc.	@	3.50 %		₹ 74.22
	TOTAL				₹ 2,194.91
	Add for Sundries and contingencies	@	3.0%		₹ 65.85
	TOTAL				₹ 2,260.75
	Add for water charges	@	1.0%		₹ 22.61
	TOTAL				₹ 2,283.36
	Add 15% for contractor's profit and overheads	@	15%		₹ 342.50
	Cost for 10.00 mtr pipe length				₹ 2,625.86
	Rate per mtr.				₹ 262.59
	Say				₹ 262.60

19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.5	40 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19248	40 mm outer dia CPVC pipe				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 165.00	₹ 2,145.00
	(10.00 + 3.0)=13.0 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.16	₹ 380.00	₹ 60.80
0212	Helper	Day	0.33	₹ 300.00	₹ 99.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 2,700.80
	Add for carriage of all materials etc.	@	1.50%		₹ 40.51
	TOTAL				₹ 2,741.31
	Add for testing of joints etc.	@	3.0 %		₹ 82.24
	TOTAL				₹ 2,823.55
	Add for Sundries and contingencies	@	3.0%		₹ 84.71
	TOTAL				₹ 2,908.26
	Add for water charges	@	1.0%		₹ 29.08
	TOTAL				₹ 2,937.34
	Add 15% for contractor's profit and overheads	@	15%		₹ 440.60
	Cost for 10.00 mtr pipe length				₹ 3,377.94
	Rate per mtr.				₹ 337.79
	Say				₹ 337.80
19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.6	50 mm nominal outer dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19249	50 mm outer dia CPVC pipe				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 285.00	₹ 3,705.00
	(10.00 + 3.0)=13.0 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.16	₹ 380.00	₹ 60.80
0212	Helper	Day	0.33	₹ 300.00	₹ 99.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 4,260.80
	Add for carriage of all materials etc.	@	1.0%		₹ 42.61
	TOTAL				₹ 4,303.41
	Add for testing of joints etc.	@	2.0 %		₹ 86.07
	TOTAL				₹ 4,389.48
	Add for Sundries and contingencies	@	3.0%		₹ 131.68
	TOTAL				₹ 4,521.16
	Add for water charges	@	1.0%		₹ 45.21
	TOTAL				₹ 4,566.37
	Add 15% for contractor's profit and overheads	@	15%		₹ 684.96
	Cost for 10.00 mtr pipe length				₹ 5,251.33
	Rate per mtr.				₹ 525.13
	Say				₹ 525.10

19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.7	62.50 mm nominal inner dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19250	62.50 mm inner dia CPVC pipe				
	Add 30 % for fitting and wastage etc. on (A)	Metre	13.00	₹ 720.00	₹ 9,360.00
	(10.00 + 3.0)=13.0 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.25	₹ 380.00	₹ 95.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 10,049.00
	Add for carriage of all materials etc.	@	0.5%		₹ 50.25
	TOTAL				₹ 10,099.25
	Add for testing of joints etc.	@	1.0 %		₹ 100.99
	TOTAL				₹ 10,200.24
	Add for Sundries and contingencies	@	3.0%		₹ 306.01
	TOTAL				₹ 10,506.24
	Add for water charges	@	1.0%		₹ 105.06
	TOTAL				₹ 10,611.31
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,591.70
	Cost for 10.00 mtr pipe length				₹ 12,203.00
	Rate per mtr.				₹ 1,220.30
	Say				₹ 1,220.30
19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.8	75 mm nominal inner dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19251	75 mm inner dia CPVC pipe				
	Add 35 % for fitting and wastage etc. on (A)	Metre	13.50	₹ 820.00	₹ 11,070.00
	(10.00 + 3.5)=13.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.25	₹ 380.00	₹ 95.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 11,759.00
	Add for carriage of all materials etc.	@	0.40%		₹ 47.04
	TOTAL				₹ 11,806.04
	Add for testing of joints etc.	@	0.80 %		₹ 94.45
	TOTAL				₹ 11,900.48
	Add for Sundries and contingencies	@	3.0%		₹ 357.01
	TOTAL				₹ 12,257.50
	Add for water charges	@	1.0%		₹ 122.57
	TOTAL				₹ 12,380.07
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,857.01
	Cost for 10.00 mtr pipe length				₹ 14,237.08
	Rate per mtr.				₹ 1,423.71
	Say				₹ 1,423.70

19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.9	100 mm nominal inner dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19252	100 mm inner dia CPVC pipe				
	Add 35 % for fitting and wastage etc. on (A)	Metre	13.50	₹ 1,030.00	₹ 13,905.00
	(10.00 + 3.5)=13.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.37	₹ 380.00	₹ 140.60
0212	Helper	Day	0.97	₹ 300.00	₹ 291.00
	for excavation & refilling etc.				
0203	Beldar	Day	0.80	₹ 300.00	₹ 240.00
0212	Helper	Day	0.80	₹ 300.00	₹ 240.00
	TOTAL				₹ 14,816.60
	Add for carriage of all materials etc.	@	0.30%		₹ 44.45
	TOTAL				₹ 14,861.05
	Add for testing of joints etc.	@	0.65 %		₹ 96.60
	TOTAL				₹ 14,957.65
	Add for Sundries and contingencies	@	3.0%		₹ 448.73
	TOTAL				₹ 15,406.38
	Add for water charges	@	1.0%		₹ 154.06
	TOTAL				₹ 15,560.44
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,334.07
	Cost for 10.00 mtr pipe length				₹ 17,894.51
	Rate per mtr.				₹ 1,789.45
	Say				₹ 1,789.50
19.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
19.9.10	150 mm nominal inner dia .Pipes.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19253	150 mm inner dia CPVC pipe				
	Add 35 % for fitting and wastage etc. on (A)	Metre	13.50	₹ 1,700.00	₹ 22,950.00
	(10.00 + 3.5)=13.50 mtr.				
	LABOUR				
0215	Fitter (grade-1)	Day	0.58	₹ 380.00	₹ 220.40
0212	Helper	Day	1.54	₹ 300.00	₹ 462.00
	for excavation & refilling etc.				
0203	Beldar	Day	1.20	₹ 300.00	₹ 360.00
0212	Helper	Day	1.20	₹ 300.00	₹ 360.00
	TOTAL				₹ 24,352.40
	Add for carriage of all materials etc.	@	0.20%		₹ 48.70
	TOTAL				₹ 24,401.10
	Add for testing of joints etc.	@	0.40 %		₹ 97.60
	TOTAL				₹ 24,498.71
	Add for Sundries and contingencies	@	3.0%		₹ 734.96
	TOTAL				₹ 25,233.67
	Add for water charges	@	1.0%		₹ 252.34
	TOTAL				₹ 25,486.01
	Add 15% for contractor's profit and overheads	@	15%		₹ 3,822.90
	Cost for 10.00 mtr pipe length				₹ 29,308.91
	Rate per mtr.				₹ 2,930.89
	Say				₹ 2,930.90
19.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc.				

	Internal work - Exposed on wall.				
19.10.1	15 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19028	15 mm dia G.I. Pipe	metre	12.00	₹ 90.00	₹ 1,080.00
	Add 20 % for fitting and wastage etc. on (A)				
	(10.00 + 2.0)=12.00 mtr.				
	CARRIAGE				
0427	15 mm : 12x1.27 kg/mtr.=15.24 kg or 0.01524 t	t	0.01524	₹ 110.94	₹ 1.69
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 1,603.09
	Add for carriage of all materials & cost of clamps, white lead, hemp,cement , sand grit, oil , wooden plugs, screws scaffolding ladders etc.	@	2.0%		₹ 32.06
	TOTAL				₹ 1,635.15
	Add for Sundries and contingencies	@	3.0%		₹ 49.05
	TOTAL				₹ 1,684.21
	Add for water charges	@	1.0%		₹ 16.84
	TOTAL				₹ 1,701.05
	Add 15% for contractor's profit and overheads	@	15%		₹ 255.16
	Cost for 10.00 mtr pipe length				₹ 1,956.21
	Rate per mtr.				₹ 195.62
	Say				₹ 195.60
19.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. linternal work - Exposed on wall :				
19.10.2	20 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19029	20 mm dia G.I. Pipe	metre	12.00	₹ 120.00	₹ 1,440.00
	Add 20 % for fitting and wastage etc. on (A)				
	(10.00 + 2.0)=12.00 mtr.				
	CARRIAGE				
0427	20 mm : 12x1.65 kg/mtr.=19.80 kg or 0.0198 t	t	0.01980	₹ 110.94	₹ 2.20
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.82	₹ 300.00	₹ 246.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 2,011.60
	Add for carriage of all materials & cost of clamps, white lead, hemp,cement , sand grit, oil , wooden plugs, screws scaffolding ladders etc.	@	2.0%		₹ 40.23
	TOTAL				₹ 2,051.83
	Add for Sundries and contingencies	@	3.0%		₹ 61.55
	TOTAL				₹ 2,113.38
	Add for water charges	@	1.0%		₹ 21.13
	TOTAL				₹ 2,134.52
	Add 15% for contractor's profit and overheads	@	15%		₹ 320.18
	Cost for 10.00 mtr pipe length				₹ 2,454.69
	Rate per mtr.				₹ 245.47
	Say				₹ 245.50
19.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. linternal work - Exposed on wall :				
19.10.3	25 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				

	MATERIALS				
19030	25 mm dia G.I. Pipe	metre	12.00	₹ 150.00	₹ 1,800.00
	Add 20 % for fitting and wastage etc. on (A)				
	(10.00 + 2.0)=12.00 mtr.				
	CARRIAGE				
0427	25 mm : 12x 2.51 kg/mtr.=30.12 kg or 0.03012 t	t	0.03012	₹ 110.94	₹ 3.34
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.98	₹ 300.00	₹ 294.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	TOTAL				₹ 2,420.74
	Add for carriage of all materials & cost of clamps, white lead, hemp,cement , sand grit, oil , wooden plugs, screws scaffolding ladders etc.	@	1.75%		₹ 42.36
	TOTAL				₹ 2,463.10
	Add for Sundries and contingencies	@	3.0%		₹ 73.89
	TOTAL				₹ 2,537.00
	Add for water charges	@	1.0%		₹ 25.37
	TOTAL				₹ 2,562.37
	Add 15% for contractor's profit and overheads	@	15%		₹ 384.36
	Cost for 10.00 mtr pipe length				₹ 2,946.72
	Rate per mtr.				₹ 294.67
	Say				₹ 294.70
19.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. linternal work - Exposed on wall :				
19.10.4	32 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19031	32 mm dia G.I. Pipe	metre	12.00	₹ 210.00	₹ 2,520.00
	Add 20 % for fitting and wastage etc. on (A)				
	(10.00 + 2.0)=12.00 mtr.				
	CARRIAGE				
0427	32 mm : 12x 3.23 kg/mtr.=38.76 kg or 0.03876 t	t	0.03876	₹ 110.94	₹ 4.30
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	0.98	₹ 300.00	₹ 294.00
0212	Helper	Day	0.98	₹ 300.00	₹ 294.00
	TOTAL				₹ 3,237.70
	Add for carriage of all materials & cost of clamps, white lead, hemp,cement , sand grit, oil , wooden plugs, screws scaffolding ladders etc.	@	2.0 %		₹ 64.75
	TOTAL				₹ 3,302.45
	Add for Sundries and contingencies	@	3.0%		₹ 99.07
	TOTAL				₹ 3,401.53
	Add for water charges	@	1.0%		₹ 34.02
	TOTAL				₹ 3,435.54
	Add 15% for contractor's profit and overheads	@	15%		₹ 515.33
	Cost for 10.00 mtr pipe length				₹ 3,950.87
	Rate per mtr.				₹ 395.09
	Say				₹ 395.10
19.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. linternal work - Exposed on wall :				
19.10.5	40 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19032	40 mm dia G.I. Pipe	metre	12.00	₹ 240.00	₹ 2,880.00
	Add 20 % for fitting and wastage etc. on (A)				
	(10.00 + 2.0)=12.00 mtr.				
	CARRIAGE				
0427	40 mm : 12x 3.72 kg/mtr.=44.64 kg or 0.04464 t	t	0.04464	₹ 110.94	₹ 4.95

	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	1.31	₹ 300.00	₹ 393.00
0212	Helper	Day	1.31	₹ 300.00	₹ 393.00
	TOTAL				₹ 3,796.35
	Add for carriage of all materials & cost of clamps, white lead, hemp, cement, sand grit, oil, wooden plugs, screws scaffolding ladders etc.	@	2.0 %		₹ 75.93
	TOTAL				₹ 3,872.28
	Add for Sundries and contingencies	@	3.0%		₹ 116.17
	TOTAL				₹ 3,988.45
	Add for water charges	@	1.0%		₹ 39.88
	TOTAL				₹ 4,028.33
	Add 15% for contractor's profit and overheads	@	15%		₹ 604.25
	Cost for 10.00 mtr pipe length				₹ 4,632.58
	Rate per mtr.				₹ 463.26
	Say				₹ 463.30
19.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. linternal work - Exposed on wall :				
19.10.6	50 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19033	50 mm dia G.I. Pipe	metre	12.00	₹ 340.00	₹ 4,080.00
	Add 20 % for fitting and wastage etc. on (A)				
	(10.00 + 2.0)=12.00 mtr.				
	CARRIAGE				
0427	50 mm : 12x 5.24 kg/mtr.=62.88 kg or 0.06288 t	t	0.06288	₹ 110.94	₹ 6.98
	LABOUR				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd Class)	Day	1.64	₹ 300.00	₹ 492.00
0212	Helper	Day	1.64	₹ 300.00	₹ 492.00
	TOTAL				₹ 5,196.38
	Add for carriage of all materials & cost of clamps, white lead, hemp, cement, sand grit, oil, wooden plugs, screws scaffolding ladders etc.	@	2.25 %		₹ 116.92
	TOTAL				₹ 5,313.29
	Add for Sundries and contingencies	@	3.0%		₹ 159.40
	TOTAL				₹ 5,472.69
		@	1.0%		₹ 54.73
	TOTAL				₹ 5,527.42
	Add 15% for contractor's profit and overheads	@	15%		₹ 829.11
	Cost for 10.00 mtr pipe length				₹ 6,356.53
	Rate per mtr.				₹ 635.65
	Say				₹ 635.70
19.11	Providing and fixing G.I pipes complete with G.I. fittings and clamps, including making good the walls/floor etc. concealed pipe including painting two coats or more with anticorrosive bitumastic paint, cutting chases and making good the same.				
19.11.1	15 mm dia nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19028	15 mm dia G.I. Pipe	metre	11.50	₹ 90.00	₹ 1,035.00
	Add 15 % for fitting and wastage etc. on (A)				
	(10.00 + 1.5)=11.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	15 mm : 11.5 x1.27 kg/mtr.=14.60 kg or 0.01460 t	t	0.01460	₹ 110.94	₹ 1.62
	Added 15 % for fittings and wastage				
	Cement Concrete 1:3:6 to close the chase				

04006	20 mm Stone Aggregate	cum	0.05450	₹ 3,969.00	₹ 216.31
02003	Fine sand	cum	0.02730	₹ 370.00	₹ 10.10
03001	Cement	t	0.01240	₹ 6,100.00	₹ 75.64
	Cement plaster 1:4				
02003	Fine sand	cum	0.01150	₹ 370.00	₹ 4.26
03001	Cement	t	0.00410	₹ 6,100.00	₹ 25.01
	CARRIAGE:				
0405	20 mm stone aggregate	cum	0.0545	₹ 159.75	₹ 8.71
0425	Fine Sand	cum	0.03880	₹ 142.63	₹ 5.53
0421	Cement	t	0.01650	₹ 110.94	₹ 1.83
	For Painting Pipes:				
	15 mm pipe:3.14x0.021x10.00=0.659 sqm.				
12008	Anti Corrosive Bitumastic paint	litre	0.075	₹ 125.00	₹ 9.38
	LABOUR:				
	For cutting chase				
0203	Belder (M)	Day	0.95	₹ 300.00	₹ 285.00
	LABOUR:				
	For fixing pipe				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	For painting pipe				
0227	Painter	Day	0.33	₹ 340.00	₹ 112.20
	For shuttering the gap				
0210	Carpenter (2nd class)	Day	0.1625	₹ 380.00	₹ 61.75
0212	Helper	Day	0.1625	₹ 300.00	₹ 48.75
	For concreting and plastering/finishing				
0219	Mason (1st class)	Day	0.350	₹ 425.00	₹ 148.75
0203	Beldar	Day	0.350	₹ 300.00	₹ 105.00
0205	waterman	Day	0.100	₹ 300.00	₹ 30.00
	TOTAL				₹ 2,706.23
	Add for Chisels for cutting chases, carriage of paint, cost of brushes, sand paper etc.	@	3.00%		₹ 81.19
	TOTAL				₹ 2,787.42
	Add for white lead, hemp, ballies and planks ,Nails etc.	@	3.0%		₹ 83.62
	TOTAL				₹ 2,871.04
	Add for Scaffolding/ladders for concreting and plaster wherever required etc.	@	2.0%		₹ 57.42
	TOTAL				₹ 2,928.46
	Add for Sundries and contingencies	@	3.0%		₹ 87.85
	TOTAL				₹ 3,016.32
	Add for water charges	@	1.0%		₹ 30.16
	TOTAL				₹ 3,046.48
	Add 15% for contractor's profit and overheads	@	15%		₹ 456.97
	Cost for 10.00 mtr pipe length				₹ 3,503.45
	Rate per mtr.				₹ 350.35
	Say				₹ 350.30
19.11	Providing and fixing G.I pipes complete with G.I. fittings and clamps, including making good the walls/floor etc. concealed pipe including painting two coats or more with anticorrosive bitumastic paint, cutting chases and making good the same.				
19.11.2	20 mm dia nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19029	20 mm dia G.I. Pipe	metre	11.50	₹ 120.00	₹ 1,380.00
	Add 15 % for fitting and wastage etc. on (A)				
	(10.00 + 1.5)=11.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	20 mm : 11.5 x1.65 kg/mtr.=18.97 kg or 0.01897 t	t	0.01897	₹ 110.94	₹ 2.10
	Added 15 % for fittings and wastage				

	Cement Concrete 1:3:6 to close the chase				
04006	20 mm Stone Aggregate	cum	0.05450	₹ 3,969.00	₹ 216.31
02002	Fine sand	cum	0.02730	₹ 300.00	₹ 8.19
03001	Cement	t	0.01240	₹ 6,100.00	₹ 75.64
	Cement plaster 1:4				
02002	Fine sand	cum	0.01150	₹ 300.00	₹ 3.45
03001	Cement	t	0.00410	₹ 6,100.00	₹ 25.01
	CARRIAGE:				
0409	20 mm stone aggregate	cum	0.0545	₹ 454.67	₹ 24.78
0410	Fine Sand	cum	0.03880	₹ 737.30	₹ 28.61
0416	Cement	t	0.01650	₹ 3,031.11	₹ 50.01
	For Painting Pipes:				
	15 mm pipe:3.14x0.021x10.00=0.659 sqm.				
12008	Anti Corrosive Bitumastic paint	litre	0.090	₹ 125.00	₹ 11.25
	LABOUR:				
	For cutting chase				
0203	Belder (M)	Day	0.95	₹ 300.00	₹ 285.00
	LABOUR:				
	For fixing pipe				
0215	Fitter (grade-1)	Day	0.33	₹ 380.00	₹ 125.40
0214	Fitter (2nd class)	Day	0.66	₹ 300.00	₹ 198.00
0212	Helper	Day	0.66	₹ 300.00	₹ 198.00
	For painting pipe				
0227	Painter	Day	0.40	₹ 340.00	₹ 136.00
	For shuttering the gap				
0210	Carpenter (2nd class)	Day	0.1625	₹ 380.00	₹ 61.75
0212	Helper	Day	0.1625	₹ 300.00	₹ 48.75
	For concreting and plastering/finishing				
0219	Mason (1st class)	Day	0.350	₹ 425.00	₹ 148.75
0203	Beldar	Day	0.350	₹ 300.00	₹ 105.00
0205	waterman	Day	0.100	₹ 300.00	₹ 30.00
	TOTAL				₹ 3,162.01
	Add for Chisels for cutting chases, carriage of paint, cost of brushes, sand paper etc.	@	3.00%		₹ 94.86
	TOTAL				₹ 3,256.87
	Add for white lead, hemp, ballies and planks ,Nails etc.	@	3.0%		₹ 97.71
	TOTAL				₹ 3,354.57
	Add for Scaffolding/ladders for concreting and plaster wherever required etc.	@	2.0%		₹ 67.09
	TOTAL				₹ 3,421.66
	Add for Sundries and contingencies	@	3.0%		₹ 102.65
	TOTAL				₹ 3,524.31
	Add for water charges	@	1.0%		₹ 35.24
	TOTAL				₹ 3,559.56
	Add 15% for contractor's profit and overheads	@	15%		₹ 533.93
	Cost for 10.00 mtr pipe length				₹ 4,093.49
	Rate per mtr.				₹ 409.35
	Say				₹ 409.30
19.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.				
	External work				
19.12.1	15 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19028	15 mm dia G.I. Pipe	metre	10.50	₹ 90.00	₹ 945.00
	Add 5 % for fitting and wastage etc. on (A)				
	(10.00 + 0.5)=10.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	15 mm : 10.5 x1.27 kg/mtr.=13.33 kg or 0.01333 t	t	0.01333	₹ 110.94	₹ 1.48

	Added 5 % for fittings and wastage				
	LABOUR:				
	For trenching & filling				
0203	Beldar	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie	Day	0.70	₹ 300.00	₹ 210.00
	For laying & joining pipe				
0215	Fitter (grade-1)	Day	0.10	₹ 380.00	₹ 38.00
0214	Fitter (2nd Class)	Day	0.225	₹ 300.00	₹ 67.50
0212	Helper	Day	0.225	₹ 300.00	₹ 67.50
	TOTAL				₹ 1,539.48
	Add for white lead lead, hemp oil etc.	@	3.5%		₹ 53.88
	TOTAL				₹ 1,593.36
	Add for Sundries and contingencies	@	3.0%		₹ 47.80
	TOTAL				₹ 1,641.16
	Add for water charges	@	1.0%		₹ 16.41
	TOTAL				₹ 1,657.57
	Add 15% for contractor's profit and overheads	@	15%		₹ 248.64
	Cost for 10.00 mtr pipe length				₹ 1,906.21
	Rate per mtr.				₹ 190.62
	Say				₹ 190.60
19.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work):				
19.12.2	20 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19029	20 mm dia G.I. Pipe	metre	10.50	₹ 120.00	₹ 1,260.00
	Add 5 % for fitting and wastage etc. on (A)				
	(10.00 + 0.5)=10.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	20 mm : 10.5 x1.65 kg/mtr.=17.325 kg or 0.01732 t	t	0.01732	₹ 110.94	₹ 1.92
	Added 5 % for fittings and wastage				
	LABOUR:				
	For trenching & filling				
0203	Beldar	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie	Day	0.70	₹ 300.00	₹ 210.00
	For laying & joining pipe				
0215	Fitter (grade-1)	Day	0.15	₹ 380.00	₹ 57.00
0214	Fitter (2nd Class)	Day	0.250	₹ 300.00	₹ 75.00
0212	Helper	Day	0.250	₹ 300.00	₹ 75.00
	TOTAL				₹ 1,888.92
	Add for white lead lead, hemp oil etc.	@	3.25%		₹ 61.39
	TOTAL				₹ 1,950.31
	Add for Sundries and contingencies	@	3.0%		₹ 58.51
	TOTAL				₹ 2,008.82
	Add for water charges	@	1.0%		₹ 20.09
	TOTAL				₹ 2,028.91
	Add 15% for contractor's profit and overheads	@	15%		₹ 304.34
	Cost for 10.00 mtr pipe length				₹ 2,333.25
	Rate per mtr.				₹ 233.32
	Say				₹ 233.30

19.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work):				
19.12.3	25 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19030	25 mm dia G.I. Pipe	metre	10.50	₹ 150.00	₹ 1,575.00
	Add 5 % for fitting and wastage etc. on (A)				
	(10.00 + 0.5)=10.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	25 mm : 10.5 x 2.51 kg/mtr.=26.35 kg or 0.02635 t	t	0.02635	₹ 110.94	₹ 2.92
	Added 5 % for fittings and wastage				
	LABOUR:				
	For trenching & filling				
0203	Beldar	Day	0.70	₹ 300.00	₹ 210.00
0212	Coolie	Day	0.70	₹ 300.00	₹ 210.00
	For laying & joining pipe				
0215	Fitter (grade-1)	Day	0.180	₹ 380.00	₹ 68.40
0214	Fitter (2nd Class)	Day	0.275	₹ 300.00	₹ 82.50
0212	Helper	Day	0.275	₹ 300.00	₹ 82.50
	TOTAL				₹ 2,231.32
	Add for white lead lead, hemp oil etc.	@	3.00%		₹ 66.94
	TOTAL				₹ 2,298.26
	Add for Sundries and contingencies	@	3.0%		₹ 68.95
	TOTAL				₹ 2,367.21
	Add for water charges	@	1.0%		₹ 23.67
	TOTAL				₹ 2,390.88
	Add 15% for contractor's profit and overheads	@	15%		₹ 358.63
	Cost for 10.00 mtr pipe length				₹ 2,749.52
	Rate per mtr.				₹ 274.95
	Say				₹ 275.00
19.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work):				
19.12.4	32 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19031	32 mm dia G.I. Pipe	metre	10.50	₹ 210.00	₹ 2,205.00
	Add 5 % for fitting and wastage etc. on (A)				
	(10.00 + 0.5)=10.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	32 mm : 10.50 x 3.23 kg/mtr.=33.91 kg or 0.03391 t	t	0.03391	₹ 110.94	₹ 3.76
	Added 5 % for fittings and wastage				
	LABOUR:				
	For trenching & filling				
0203	Beldar	Day	0.700	₹ 300.00	₹ 210.00
0212	Coolie	Day	0.700	₹ 300.00	₹ 210.00
	For laying & joining pipe				
0215	Fitter (grade-1)	Day	0.200	₹ 380.00	₹ 76.00
0214	Fitter (2nd Class)	Day	0.300	₹ 300.00	₹ 90.00
0212	Helper	Day	0.300	₹ 300.00	₹ 90.00
	TOTAL				₹ 2,884.76
	Add for white lead lead, hemp oil etc.	@	3.00%		₹ 86.54
	TOTAL				₹ 2,971.30
	Add for Sundries and contingencies	@	3.0%		₹ 89.14
	TOTAL				₹ 3,060.44
	Add for water charges	@	1.0%		₹ 30.60

	TOTAL				₹ 3,091.05
	Add 15% for contractor's profit and overheads	@	15%		₹ 463.66
	Cost for 10.00 mtr pipe length				₹ 3,554.71
	Rate per mtr.				₹ 355.47
	Say				₹ 355.50
19.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work):				
19.12.5	40 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19032	40 mm dia G.I. Pipe	metre	10.50	₹ 240.00	₹ 2,520.00
	Add 5 % for fitting and wastage etc. on (A)				
	(10.00 + 0.5)=10.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	40 mm : 10.5 x 3.72 kg/mtr.=39.06 kg or 0.0391 t	t	0.03910	₹ 110.94	₹ 4.34
	Added 5 % for fittings and wastage				
	LABOUR:				
	For trenching & filling				
0203	Beldar	Day	0.700	₹ 300.00	₹ 210.00
0212	Coolie	Day	0.700	₹ 300.00	₹ 210.00
	For laying & joining pipe				
0215	Fitter (grade-1)	Day	0.250	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.350	₹ 300.00	₹ 105.00
0212	Helper	Day	0.350	₹ 300.00	₹ 105.00
	TOTAL				₹ 3,249.34
	Add for white lead lead, hemp oil etc.	@	3.00%		₹ 97.48
	TOTAL				₹ 3,346.82
	Add for Sundries and contingencies	@	3.0%		₹ 100.40
	TOTAL				₹ 3,447.22
	Add for water charges	@	1.0%		₹ 34.47
	TOTAL				₹ 3,481.69
	Add 15% for contractor's profit and overheads	@	15%		₹ 522.25
	Cost for 10.00 mtr pipe length				₹ 4,003.95
	Rate per mtr.				₹ 400.39
	Say				₹ 400.40
19.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work):				
19.12.6	50 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19033	50 mm dia G.I. Pipe	metre	10.50	₹ 340.00	₹ 3,570.00
	Add 5 % for fitting and wastage etc. on (A)				
	(10.00 + 0.5)=10.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	50 mm : 10.50 x 5.24 kg/mtr.=55.02 kg or 0.0550 t	t	0.05500	₹ 110.94	₹ 6.10
	Added 5 % for fittings and wastage				
	LABOUR:				
	For trenching & filling				
0203	Beldar	Day	0.700	₹ 300.00	₹ 210.00
0212	Coolie	Day	0.700	₹ 300.00	₹ 210.00
	For laying & joining pipe				
0215	Fitter (grade-1)	Day	0.250	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.350	₹ 300.00	₹ 105.00
0212	Helper	Day	0.350	₹ 300.00	₹ 105.00
	TOTAL				₹ 4,301.10

	Add for white lead lead, hemp oil etc.	@	2.50%		₹ 107.53
	TOTAL				₹ 4,408.63
	Add for Sundries and contingencies	@	3.0%		₹ 132.26
	TOTAL				₹ 4,540.89
	Add for water charges	@	1.0%		₹ 45.41
	TOTAL				₹ 4,586.30
	Add 15% for contractor's profit and overheads	@	15%		₹ 687.94
	Cost for 10.00 mtr pipe length				₹ 5,274.24
	Rate per mtr.				₹ 527.42
	Say				₹ 527.40
19.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work):				
19.12.7	65 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19034	65 mm dia G.I. Pipe	metre	10.50	₹ 405.00	₹ 4,252.50
	Add 5 % for fitting and wastage etc. on (A)				
	(10.00 + 0.5)=10.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	65 mm : 10.50 x 6.666 kg/mtr.=70.00 kg or 0.070 t	t	0.0700	₹ 110.94	₹ 7.77
	Added 5 % for fittings and wastage				
	LABOUR:				
	For trenching & filling				
0203	Beldar	Day	0.700	₹ 300.00	₹ 210.00
0212	Coolie	Day	0.700	₹ 300.00	₹ 210.00
	For laying & joining pipe				
0215	Fitter (grade-1)	Day	0.300	₹ 380.00	₹ 114.00
0214	Fitter (2nd Class)	Day	0.400	₹ 300.00	₹ 120.00
0212	Helper	Day	0.400	₹ 300.00	₹ 120.00
	TOTAL				₹ 5,034.27
	Add for white lead lead, hemp oil etc.	@	2.0%		₹ 100.69
	TOTAL				₹ 5,134.95
	Add for Sundries and contingencies	@	3.0%		₹ 154.05
	TOTAL				₹ 5,289.00
	Add for water charges	@	1.0%		₹ 52.89
	TOTAL				₹ 5,341.89
	Add 15% for contractor's profit and overheads	@	15%		₹ 801.28
	Cost for 10.00 mtr pipe length				₹ 6,143.17
	Rate per mtr.				₹ 614.32
	Say				₹ 614.30
19.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work):				
19.12.8	80 mm dia. nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre(A)				
	MATERIALS				
19035	80 mm dia G.I. Pipe	metre	10.50	₹ 515.00	₹ 5,407.50
	Add 5 % for fitting and wastage etc. on (A)				
	(10.00 + 0.5)=10.50 mtr.				
	CARRIAGE:				
	Pipes & fittings				
0427	80 mm : 10.50 x 8.63 kg/mtr.=90.70 kg or 0.0907 t	t	0.0907	₹ 110.94	₹ 10.06
	Added 5 % for fittings and wastage				
	LABOUR:				
	For trenching & filling				
0203	Beldar	Day	0.700	₹ 300.00	₹ 210.00

0212	Coolie	Day	0.700	₹ 300.00	₹ 210.00
	For laying & joining pipe				
0215	Fitter (grade-1)	Day	0.075	₹ 380.00	₹ 28.50
0214	Fitter (2nd Class)	Day	0.425	₹ 300.00	₹ 127.50
0212	Helper	Day	0.425	₹ 300.00	₹ 127.50
	TOTAL				₹ 6,121.06
	Add for white lead lead, hemp oil etc.	@	2.0%		₹ 122.42
	TOTAL				₹ 6,243.48
	Add for Sundries and contingencies	@	3.0%		₹ 187.30
	TOTAL				₹ 6,430.79
	Add for water charges	@	1.0%		₹ 64.31
	TOTAL				₹ 6,495.10
	Add 15% for contractor's profit and overheads	@	15%		₹ 974.26
	Cost for 10.00 mtr pipe length				₹ 7,469.36
	Rate per mtr.				₹ 746.94
	Say				₹ 746.90
19.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
19.13.1	25 to 40 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one connection.				
	Take 25mm dia as an average size.				
	Materials:-				
19038	G.I. Tee of size 25 mm dia	each	1.00	₹ 64.00	₹ 64.00
19036	G.L. jam nut of size 25mm	each	1.00	₹ 8.00	₹ 8.00
	LABOUR:				
0215	Fitter (grade-1)	Day	0.380	₹ 380.00	₹ 144.40
0212	Helper	Day	0.380	₹ 300.00	₹ 114.00
	TOTAL				₹ 330.40
	Add for Sundries and contingencies	@	3.0%		₹ 9.91
	TOTAL				₹ 340.31
	Add for water charges	@	1.0%		₹ 3.40
	TOTAL				₹ 343.72
	Add 15% for contractor's profit and overheads	@	15%		₹ 51.56
	Cost for per connection				₹ 395.27
	Say				₹ 395.30
19.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
19.13.2	50 to 80 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one connection.				
	Take 65 mm dia as an average size.				
	Materials:-				
19039	G.I. Tee of size 65 mm dia	each	1.00	₹ 280.00	₹ 280.00
19037	G.L. jam nut of size 65mm	each	1.00	₹ 23.00	₹ 23.00
	LABOUR:				
0215	Fitter (grade-1)	Day	0.450	₹ 380.00	₹ 171.00
0212	Helper	Day	0.450	₹ 300.00	₹ 135.00
	TOTAL				₹ 609.00
	Add for Sundries and contingencies	@	3.0%		₹ 18.27
	TOTAL				₹ 627.27
	Add for water charges	@	1.0%		₹ 6.27
	TOTAL				₹ 633.54
	Add 15% for contractor's profit and overheads	@	15%		₹ 95.03
	Cost for per connection				₹ 728.57
	Say				₹ 728.60

19.14	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for fixing water meter without the cost of stop cock & water meter				
	Materials :-				
19036	G .I. Jam nut 25mm dia.	each	1.00	₹ 8.00	₹ 8.00
	LABOUR:				
0216	Foreman	Day	0.050	₹ 425.00	₹ 21.25
0215	Fitter (grade-1)	Day	0.360	₹ 380.00	₹ 136.80
0212	Helper	Day	0.360	₹ 300.00	₹ 108.00
	TOTAL				₹ 274.05
	Add for Sundries and contingencies	@	3.0%		₹ 8.22
	TOTAL				₹ 282.27
	Add for water charges	@	1.0%		₹ 2.82
	TOTAL				₹ 285.09
	Add 15% for contractor's profit and overheads	@	15%		₹ 42.76
	Cost for per connection				₹ 327.86
	Say				₹ 327.90
19.15	Providing and fixing brass bib cock of approved quality :				
19.15.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19005	15 mm dia. brass bib cock.	each	1.00	₹ 215.00	₹ 215.00
	TOTAL				₹ 215.00
	Add for Carriage of materials and fixing charges etc.	@	5.0%		₹ 10.75
	TOTAL				₹ 225.75
	Add for Sundries and contingencies	@	3.0%		₹ 6.77
	TOTAL				₹ 232.52
	Add 15% for contractor's profit and overheads	@	15%		₹ 34.88
	Cost for p/f one brass bib cock				₹ 267.40
	Say				₹ 267.40
19.15	Providing and fixing brass bib cock of approved quality :				
19.15.2	20 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19006	20 mm dia. brass bib cock.	each	1.00	₹ 265.00	₹ 265.00
	TOTAL				₹ 265.00
	Add for Carriage of materials and fixing charges etc.	@	4.50%		₹ 11.93
	TOTAL				₹ 276.93
	Add for Sundries and contingencies	@	3.0%		₹ 8.31
	TOTAL				₹ 285.23
	Add 15% for contractor's profit and overheads	@	15%		₹ 42.78
	Cost for p/f one brass bib cock				₹ 328.02
	Say				₹ 328.00
19.16	Providing and fixing brass stop cock of approved quality :				
19.16.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19007	15 mm dia. brass stop cock.	each	1.00	₹ 225.00	₹ 225.00
	TOTAL				₹ 225.00
	Add for Carriage of materials and fixing charges etc.	@	4.50%		₹ 10.13
	TOTAL				₹ 235.13

	Add for Sundries and contingencies	@	3.0%		₹	7.05
	TOTAL				₹	242.18
	Add 15% for contractor's profit and overheads	@	15%		₹	36.33
	Cost for p/f one brass stop cock				₹	278.51
	Say				₹	278.50
19.16	Providing and fixing brass stop cock of approved quality :					
19.16.2	20 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials :-					
19008	20 mm dia. brass stop cock.	each	1.00	₹ 320.00	₹	320.00
	TOTAL				₹	320.00
	Add for Carriage of materials and fixing charges etc.	@	4.50%		₹	14.40
	TOTAL				₹	334.40
	Add for Sundries and contingencies	@	3.0%		₹	10.03
	TOTAL				₹	344.43
	Add 15% for contractor's profit and overheads	@	15%		₹	51.66
	Cost for p/f one brass stop cock				₹	396.10
	Say				₹	396.10
19.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):					
19.17.1	25 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials :-					
19061	25 mm dia. Gun metal gate valve with wheel	each	1.00	₹ 336.00	₹	336.00
	TOTAL				₹	336.00
	Add for Carriage of materials and fixing charges etc.	@	4.0%		₹	13.44
	TOTAL				₹	349.44
	Add for Sundries and contingencies	@	3.0%		₹	10.48
	TOTAL				₹	359.92
	Add 15% for contractor's profit and overheads	@	15%		₹	53.99
	Cost for p/f one brass full way gate valve				₹	413.91
	Say				₹	413.90
19.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):					
19.17.2	32 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials :-					
19062	32 mm dia. Gun metal gate valve with wheel	each	1.00	₹ 424.00	₹	424.00
	TOTAL				₹	424.00
	Add for Carriage of materials and fixing charges etc.	@	4.0%		₹	16.96
	TOTAL				₹	440.96
	Add for Sundries and contingencies	@	3.0%		₹	13.23
	TOTAL				₹	454.19
	Add 15% for contractor's profit and overheads	@	15%		₹	68.13
	Cost for p/f one brass full way gate valve				₹	522.32
	Say				₹	522.30
19.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):					
19.17.3	40 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials :-					
19063	40 mm dia. Gun metal gate valve with wheel	each	1.00	₹ 473.00	₹	473.00

	TOTAL				₹	473.00
	Add for Carriage of materials and fixing charges etc.	@	4.0%		₹	18.92
	TOTAL				₹	491.92
	Add for Sundries and contingencies	@	3.0%		₹	14.76
	TOTAL				₹	506.68
	Add 15% for contractor's profit and overheads	@	15%		₹	76.00
	Cost for p/f one brass full way gate valve				₹	582.68
	Say				₹	582.70
19.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):					
19.17.4	50 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials :-					
19064	50 mm dia. Gun metal gate valve with wheel	each	1.00	₹ 691.00	₹	691.00
	TOTAL				₹	691.00
	Add for Carriage of materials and fixing charges etc.	@	3.0%		₹	20.73
	TOTAL				₹	711.73
	Add for Sundries and contingencies	@	3.0%		₹	21.35
	TOTAL				₹	733.08
	Add 15% for contractor's profit and overheads	@	15%		₹	109.96
	Cost for p/f one brass full way gate valve				₹	843.04
	Say				₹	843.00
19.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):					
19.17.5	65 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials :-					
19065	65 mm dia. Gun metal gate valve with wheel	each	1.00	₹ 1,002.00	₹	1,002.00
	TOTAL				₹	1,002.00
	Add for Carriage of materials and fixing charges etc.	@	2.50%		₹	25.05
	TOTAL				₹	1,027.05
	Add for Sundries and contingencies	@	3.0%		₹	30.81
	TOTAL				₹	1,057.86
	Add 15% for contractor's profit and overheads	@	15%		₹	158.68
	Cost for p/f one brass full way gate valve				₹	1,216.54
	Say				₹	1,216.50
19.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):					
19.17.6	80 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials :-					
19066	80 mm dia. Gun metal gate valve with wheel	each	1.00	₹ 1,660.00	₹	1,660.00
	TOTAL				₹	1,660.00
	Add for Carriage of materials and fixing charges etc.	@	2.0%		₹	33.20
	TOTAL				₹	1,693.20
	Add for Sundries and contingencies	@	3.0%		₹	50.80
	TOTAL				₹	1,744.00
	Add 15% for contractor's profit and overheads	@	15%		₹	261.60
	Cost for p/f one brass full way gate valve				₹	2,005.60
	Say				₹	2,005.60

19.18	Providing and fixing ball valve (brass) of approved quality complete :				
19.18.1	High or low pressure with plastic floats:				
19.18.1.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19058	15 mm ball valve with float	each	1.00	₹ 250.00	₹ 250.00
	TOTAL				₹ 250.00
	Add for Carriage of materials and fixing charges etc.	@	10.35 %		₹ 25.88
	TOTAL				₹ 275.88
	Add for Sundries and contingencies	@	3.0%		₹ 8.28
	TOTAL				₹ 284.15
	Add 15% for contractor's profit and overheads	@	15%		₹ 42.62
	Rate for per ball valve				₹ 326.77
	Say				₹ 326.80
19.18	Providing and fixing ball valve (brass) of approved quality complete :				
19.18.1	High or low pressure with plastic floats:				
19.18.1.2	20 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19059	20 mm ball valve with float	each	1.00	₹ 372.00	₹ 372.00
	TOTAL				₹ 372.00
	Add for Carriage of materials and fixing charges etc.	@	10.00 %		₹ 37.20
	TOTAL				₹ 409.20
	Add for Sundries and contingencies	@	3.0%		₹ 12.28
	TOTAL				₹ 421.48
	Add 15% for contractor's profit and overheads	@	15%		₹ 63.22
	Rate for per ball valve				₹ 484.70
	Say				₹ 484.70
19.18	Providing and fixing ball valve (brass) of approved quality complete :				
19.18.1	High or low pressure with plastic floats:				
19.18.1.3	25 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19060	20 mm ball valve with float	each	1.00	₹ 430.00	₹ 430.00
	TOTAL				₹ 430.00
	Add for Carriage of materials and fixing charges etc.	@	10.00 %		₹ 43.00
	TOTAL				₹ 473.00
	Add for Sundries and contingencies	@	3.0%		₹ 14.19
	TOTAL				₹ 487.19
	Add 15% for contractor's profit and overheads	@	15%		₹ 73.08
	Rate for per ball valve				₹ 560.27
	Say				₹ 560.30
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
19.19.1	25 mm nominal bore				
19.19.1.1	Horizontal				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19067	25 mm non return valve	each	1.00	₹ 340.00	₹ 340.00
	TOTAL				₹ 340.00
	Add for Carriage of materials and fixing charges etc.	@	5.00 %		₹ 17.00
	TOTAL				₹ 357.00

	Add for Sundries and contingencies	@	3.0%		₹	10.71
	TOTAL				₹	367.71
	Add 15% for contractor's profit and overheads	@	15%		₹	55.16
	Rate for per non-return valve				₹	422.87
	Say				₹	422.90
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):					
19.19.1	25 mm nominal bore					
19.19.1.2	Vertical					
Code	Description	Unit	Quantity	Rate		Amount
	Details of cost for one no.					
	Materials :-					
19088	25 mm non return valve	each	1.00	₹ 372.00	₹	372.00
	TOTAL				₹	372.00
	Add for Carriage of materials and fixing charges etc.	@	5.00 %		₹	18.60
	TOTAL				₹	390.60
	Add for Sundries and contingencies	@	3.0%		₹	11.72
	TOTAL				₹	402.32
	Add 15% for contractor's profit and overheads	@	15%		₹	60.35
	Rate for per non-return valve				₹	462.67
	Say				₹	462.70
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):					
19.19.2	32 mm nominal bore					
19.19.1.1	Horizontal					
Code	Description	Unit	Quantity	Rate		Amount
	Details of cost for one no.					
	Materials :-					
19068	32 mm non return valve	each	1.00	₹ 437.00	₹	437.00
	TOTAL				₹	437.00
	Add for Carriage of materials and fixing charges etc.	@	4.50 %		₹	19.67
	TOTAL				₹	456.67
	Add for Sundries and contingencies	@	3.0%		₹	13.70
	TOTAL				₹	470.36
	Add 15% for contractor's profit and overheads	@	15%		₹	70.55
	Rate for per non-return valve				₹	540.92
	Say				₹	540.90
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):					
19.19.2	32 mm nominal bore					
19.19.1.2	Vertical					
Code	Description	Unit	Quantity	Rate		Amount
	Details of cost for one no.					
	Materials :-					
19089	32 mm non return valve	each	1.00	₹ 551.00	₹	551.00
	TOTAL				₹	551.00
	Add for Carriage of materials and fixing charges etc.	@	4.50 %		₹	24.80
	TOTAL				₹	575.80
	Add for Sundries and contingencies	@	3.0%		₹	17.27
	TOTAL				₹	593.07
	Add 15% for contractor's profit and overheads	@	15%		₹	88.96
	Rate for per non-return valve				₹	682.03
	Say				₹	682.00
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):					

19.19.3	40 mm nominal bore				
19.19.1.1	Horizontal				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19069	40 mm non return valve	each	1.00	₹ 587.00	₹ 587.00
	TOTAL				₹ 587.00
	Add for Carriage of materials and fixing charges etc.	@	4.0 %		₹ 23.48
	TOTAL				₹ 610.48
	Add for Sundries and contingencies	@	3.0%		₹ 18.31
	TOTAL				₹ 628.79
	Add 15% for contractor's profit and overheads	@	15%		₹ 94.32
	Rate for per non-return valve				₹ 723.11
	Say				₹ 723.10
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
19.19.3	40 mm nominal bore				
19.19.1.2	Vertical				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19090	40 mm non return valve	each	1.00	₹ 723.00	₹ 723.00
	TOTAL				₹ 723.00
	Add for Carriage of materials and fixing charges etc.	@	4.0 %		₹ 28.92
	TOTAL				₹ 751.92
	Add for Sundries and contingencies	@	3.0%		₹ 22.56
	TOTAL				₹ 774.48
	Add 15% for contractor's profit and overheads	@	15%		₹ 116.17
	Rate for per non-return valve				₹ 890.65
	Say				₹ 890.60
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
19.19.4	50 mm nominal bore				
19.19.1.1	Horizontal				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19070	50 mm non return valve	each	1.00	₹ 884.00	₹ 884.00
	TOTAL				₹ 884.00
	Add for Carriage of materials and fixing charges etc.	@	3.0 %		₹ 26.52
	TOTAL				₹ 910.52
	Add for Sundries and contingencies	@	3.0%		₹ 27.32
	TOTAL				₹ 937.84
	Add 15% for contractor's profit and overheads	@	15%		₹ 140.68
	Rate for per non-return valve				₹ 1,078.51
	Say				₹ 1,078.50
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
19.19.4	50 mm nominal bore				
19.19.1.2	Vertical				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19091	50 mm non return valve	each	1.00	₹ 1,019.00	₹ 1,019.00
	TOTAL				₹ 1,019.00
	Add for Carriage of materials and fixing charges etc.	@	3.0 %		₹ 30.57
	TOTAL				₹ 1,049.57

	Add for Sundries and contingencies	@	3.0%		₹ 31.49
	TOTAL				₹ 1,081.06
	Add 15% for contractor's profit and overheads	@	15%		₹ 162.16
	Rate for per non-return valve				₹ 1,243.22
	Say				₹ 1,243.20
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
19.19.5	65 mm nominal bore				
19.19.1.1	Horizontal				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19071	65 mm non return valve	each	1.00	₹ 1,553.00	₹ 1,553.00
	TOTAL				₹ 1,553.00
	Add for Carriage of materials and fixing charges etc.	@	2.0 %		₹ 31.06
	TOTAL				₹ 1,584.06
	Add for Sundries and contingencies	@	3.0%		₹ 47.52
	TOTAL				₹ 1,631.58
	Add 15% for contractor's profit and overheads	@	15%		₹ 244.74
	Rate for per non-return valve				₹ 1,876.32
	Say				₹ 1,876.30
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
19.19.5	65 mm nominal bore				
19.19.1.2	Vertical				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19092	65 mm non return valve	each	1.00	₹ 1,782.00	₹ 1,782.00
	TOTAL				₹ 1,782.00
	Add for Carriage of materials and fixing charges etc.	@	2.0 %		₹ 35.64
	TOTAL				₹ 1,817.64
	Add for Sundries and contingencies	@	3.0%		₹ 54.53
	TOTAL				₹ 1,872.17
	Add 15% for contractor's profit and overheads	@	15%		₹ 280.83
	Rate for per non-return valve				₹ 2,152.99
	Say				₹ 2,153.00
19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
19.19.6	80 mm nominal bore				
19.19.1.1	Horizontal				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19072	80 mm non return valve	each	1.00	₹ 2,204.00	₹ 2,204.00
	TOTAL				₹ 2,204.00
	Add for Carriage of materials and fixing charges etc.	@	1.0 %		₹ 22.04
	TOTAL				₹ 2,226.04
	Add for Sundries and contingencies	@	3.0%		₹ 66.78
	TOTAL				₹ 2,292.82
	Add 15% for contractor's profit and overheads	@	15%		₹ 343.92
	Rate for per non-return valve				₹ 2,636.74
	Say				₹ 2,636.70

19.19	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
19.19.6	80 mm nominal bore				
19.19.1.2	Vertical				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19093	80 mm non return valve	each	1.00	₹ 2,332.00	₹ 2,332.00
	TOTAL				₹ 2,332.00
	Add for Carriage of materials and fixing charges etc.	@	1.0 %		₹ 23.32
	TOTAL				₹ 2,355.32
	Add for Sundries and contingencies	@	3.0%		₹ 70.66
	TOTAL				₹ 2,425.98
	Add 15% for contractor's profit and overheads	@	15%		₹ 363.90
	Rate for per non-return valve				₹ 2,789.88
	Say				₹ 2,789.90
19.20	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :				
19.20.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19009	15 mrn diameter brass-ferrule	each	1.00	₹ 140.00	₹ 140.00
	TOTAL				₹ 140.00
	Add for Carriage of materials and fixing charges etc.	@	50.0 %		₹ 70.00
	TOTAL				₹ 210.00
	Add for Sundries and contingencies	@	3.0%		₹ 6.30
	TOTAL				₹ 216.30
	Add 15% for contractor's profit and overheads	@	15%		₹ 32.45
	Rate for per per ferrule & cover				₹ 248.75
	Say				₹ 248.70
19.20	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :				
19.20.2	20 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19010	20 mrn diameter brass-ferrule	each	1.00	₹ 165.00	₹ 165.00
	TOTAL				₹ 165.00
	Add for Carriage of materials and fixing charges etc.	@	48.0 %		₹ 79.20
	TOTAL				₹ 244.20
	Add for Sundries and contingencies	@	3.0%		₹ 7.33
	TOTAL				₹ 251.53
	Add 15% for contractor's profit and overheads	@	15%		₹ 37.73
	Rate for per per ferrule & cover				₹ 289.25
	Say				₹ 289.30
19.20	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :				
19.20.3	25 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				

19011	25 mm diameter brass-ferrule	each	1.00	₹ 228.00	₹ 228.00
	TOTAL				₹ 228.00
	Add for Carriage of materials and fixing charges etc.	@	35.0 %		₹ 79.80
	TOTAL				₹ 307.80
	Add for Sundries and contingencies	@	3.0%		₹ 9.23
	TOTAL				₹ 317.03
	Add 15% for contractor's profit and overheads	@	15%		₹ 47.56
	Rate for per per ferrule & cover				₹ 364.59
	Say				₹ 364.60
19.21	Providing and fixing uplasticised PVC connection pipe with brass unions :				
19.21.1	30 cm length				
19.21.1.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19049	15 mm P.V.C. connection.pipe with brass	each	1.0	₹ 35.00	₹ 35.00
	TOTAL				₹ 35.00
	Add for Carriage of materials and fixing charges etc.	@	70.0 %		₹ 24.50
	TOTAL				₹ 59.50
	Add for Sundries and contingencies	@	3.0%		₹ 1.79
	TOTAL				₹ 61.29
	Add 15% for contractor's profit and overheads	@	15%		₹ 9.19
	Rate for per per ferrule & cover				₹ 70.48
	Say				₹ 70.50
19.21	Providing and fixing uplasticised PVC connection pipe with brass unions :				
19.21.1	30 cm length				
19.21.1.2	20 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19050	20 mm P.V.C. connection.pipe with brass	each	1.0	₹ 50.00	₹ 50.00
	TOTAL				₹ 50.00
	Add for Carriage of materials and fixing charges etc.	@	50.0 %		₹ 25.00
	TOTAL				₹ 75.00
	Add for Sundries and contingencies	@	3.0%		₹ 2.25
	TOTAL				₹ 77.25
	Add 15% for contractor's profit and overheads	@	15%		₹ 11.59
	Rate for per per ferrule & cover				₹ 88.84
	Say				₹ 88.80
19.21	Providing and fixing uplasticised PVC connection pipe with brass unions :				
19.21.2	45 cm length				
19.21.2.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19051	15 mm P.V.C. connection.pipe with brass	each	1.0	₹ 50.00	₹ 50.00
	TOTAL				₹ 50.00
	Add for Carriage of materials and fixing charges etc.	@	55.0 %		₹ 27.50
	TOTAL				₹ 77.50
	Add for Sundries and contingencies	@	3.0%		₹ 2.33
	TOTAL				₹ 79.83
	Add 15% for contractor's profit and overheads	@	15%		₹ 11.97
	Rate for per per ferrule & cover				₹ 91.80

	Say				₹ 91.80
19.21	Providing and fixing uplasticised PVC connection pipe with brass unions :				
19.21.2	45 cm length				
19.21.2.2	20 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19052	20 mm P.V.C. connection.pipe with brass	each	1.0	₹ 70.00	₹ 70.00
	TOTAL				₹ 70.00
	Add for Carriage of materials and fixing charges etc.	@	40.0 %		₹ 28.00
	TOTAL				₹ 98.00
	Add for Sundries and contingencies	@	3.0%		₹ 2.94
	TOTAL				₹ 100.94
	Add 15% for contractor's profit and overheads	@	15%		₹ 15.14
	Rate for per per ferrule & cover				₹ 116.08
	Say				₹ 116.08
					₹ 116.10
19.22	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet:				
19.22.1	100 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19054	100mm dia. CP., brass shower rose	each	1.00	₹ 70.00	₹ 70.00
	TOTAL				₹ 70.00
	Add for Carriage of materials and fixing charges etc.	@	25.0 %		₹ 17.50
	TOTAL				₹ 87.50
	Add for Sundries and contingencies	@	3.0%		₹ 2.63
	TOTAL				₹ 90.13
	Add 15% for contractor's profit and overheads	@	15%		₹ 13.52
	Rate for per per ferrule & cover				₹ 103.64
	Say				₹ 103.64
					₹ 103.60
19.22	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet:				
19.22.2	150 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials :-				
19055	150 mm dia. CP., brass shower rose	each	1.00	₹ 100.00	₹ 100.00
	TOTAL				₹ 100.00
	Add for Carriage of materials and fixing charges etc.	@	22.0 %		₹ 22.00
	TOTAL				₹ 122.00
	Add for Sundries and contingencies	@	3.0%		₹ 3.66
	TOTAL				₹ 125.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 18.85
	Rate for per per ferrule & cover				₹ 144.51
	Say				₹ 144.51
					₹ 144.50
19.23	Laying in position centrifugally cast (spun) iron S&S or flanged pipes (excluding cost of pipe)				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5.14 quintal				
	10 m of 200 mm dia C.I. pipe class 'A'				
	Weight = (2x257) = 514 kg = 5.14 quintal				
	Labour for lowering & laying pipe				
0215	Fitter (grade-1)	Day	0.17	₹ 380.00	₹ 64.60
0214	Fitter (2nd Class)	Day	0.17	₹ 300.00	₹ 51.00
0212	Helper	Day	1.33	₹ 300.00	₹ 399.00

	TOTAL				₹	514.60
	Add for Ballies, Ropes, Crow bars and other materials required for lowering pipe etc.	@	10.0 %		₹	51.46
	TOTAL				₹	566.06
	Add for Sundries and contingencies	@	3.0%		₹	16.98
	TOTAL				₹	583.04
	Add 15% for contractor's profit and overheads	@	15%		₹	87.46
	Cost for 5.14 quintal				₹	670.50
	Cost per quintal (excluding cost of pipe)				₹	130.45
	Say				₹	130.45
					₹	130.40
19.24	Laying in position S&S or flanged C.I. special such tees, bends collars, tapers and caps etc. (excluding cost of specials).					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 7quintal					
	10 Nos. Tee 200x150mm Weight = 70x10 =700 kg					
	Labour for lowering & laying					
0215	Fitter (grade-1)	Day	0.93	₹ 380.00	₹	353.40
0214	Fitter (2nd Class)	Day	0.62	₹ 300.00	₹	186.00
0212	Helper	Day	2.48	₹ 300.00	₹	744.00
	TOTAL				₹	1,283.40
	Add for Ballies, Ropes, Crow bars and other materials required for lowering pipe & carriage etc.	@	7.50 %		₹	96.26
	TOTAL				₹	1,379.66
	Add for Sundries and contingencies	@	3.0%		₹	41.39
	TOTAL				₹	1,421.04
	Add 15% for contractor's profit and overheads	@	15%		₹	213.16
	Cost for 7.0 quintal				₹	1,634.20
	Cost per quintal (excluding cost of specials)				₹	233.46
	Say				₹	233.46
					₹	233.50
19.25	Providing and laying S&S C.I. standard specials such as tees, bends, collars, tapers, caps etc. (Heavy class)					
19.25.1	Upto 300 mm dia.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 1 quintal					
	Materials :-					
	Consider the avg. wt. of 200 mm dia bends for upto 300 mm dia bend=0.67q.					
19024	Cost of specials	quintal	0.67	₹ 3,600.00	₹	2,412.00
0407	Carriage of material	t	0.067	₹ 110.94	₹	7.43
	Labour for lowering & laying					
0215	Fitter (grade-1)	Day	0.120	₹ 380.00	₹	45.60
0214	Fitter (2nd Class)	Day	0.200	₹ 300.00	₹	60.00
0212	Helper	Day	0.325	₹ 300.00	₹	97.50
	TOTAL				₹	2,622.53
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	3.250 %		₹	85.23
	TOTAL				₹	157.50
	Add for Barricading and Night Lamps and watchman	@	2.20%		₹	3.47
	TOTAL				₹	2,707.77
	Add for Sundries and contingencies	@	3.0%		₹	81.23
	TOTAL				₹	2,789.00
	Add 15% for contractor's profit and overheads	@	15%		₹	418.35
	Cost for 0.67 quintal				₹	3,207.35
	Cost per quintal				₹	4,787.09
	Say				₹	4,787.10
19.25	Providing and laying S&S C.I. standard specials such as tees, bends, collars, tapers, caps etc. (Heavy class)					

19.25.2	Over 300 mm dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 quintal				
	Materials :-				
	Consider the avg. wt. of 400 mm dia bends for over 300 mm dia bend=2.34 q.				
19025	Cost of specials	quintal	2.340	₹ 3,700.00	₹ 8,658.00
0407	Carriage of material	t	0.234	₹ 110.94	₹ 25.96
	Labour for lowering & laying				
0215	Fitter (grade-1)	Day	0.250	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.550	₹ 300.00	₹ 165.00
0212	Helper	Day	1.20	₹ 300.00	₹ 360.00
	TOTAL				₹ 9,303.96
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	2.0 %		₹ 186.08
	TOTAL				₹ 9,490.04
	Add for Barricading and Night Lamps and watchman	@	2.0%		₹ 189.80
	TOTAL				₹ 9,490.04
	Add for Sundries and contingencies	@	3.0%		₹ 284.70
	TOTAL				₹ 9,774.74
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,466.21
	Cost for 2.34 quintal				₹ 11,240.95
	Cost per quintal				₹ 4,803.83
	Say				₹ 4,803.80
19.26	Providing and laying flanged C.I. standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538 :				
19.26.1	Upto 300 mm dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 quintal				
	Materials :-				
	Consider one No. 250 mm dia bends of weight 0.80 q per bend.				
19026	Cost of specials	quintal	0.80	₹ 5,800.00	₹ 4,640.00
0407	Carriage of material	t	0.080	₹ 110.94	₹ 8.88
	Labour for lowering & laying				
0215	Fitter (grade-1)	Day	0.100	₹ 380.00	₹ 38.00
0214	Fitter (2nd Class)	Day	0.125	₹ 300.00	₹ 37.50
0212	Helper	Day	0.45	₹ 300.00	₹ 135.00
	TOTAL				₹ 4,859.38
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	3.20 %		₹ 155.50
	TOTAL				₹ 5,014.88
	Add for Barricading and Night Lamps and watchman	@	4.25 %		₹ 213.13
	TOTAL				₹ 5,228.01
	Add for Sundries and contingencies	@	3.0%		₹ 156.84
	TOTAL				₹ 5,384.85
	Add 15% for contractor's profit and overheads	@	15%		₹ 807.73
	Cost for 0.80 quintal				₹ 6,192.57
	Cost per quintal				₹ 7,740.72
	Say				₹ 7,740.70
19.26	Providing and laying flanged C.I. standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538 :				
19.26.2	Over 300 mm dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 quintal				
	Materials :-				

	Consider one No. 500 mm dia bends of weight 4.46 q per bend.				
19027	Cost of specials	quintal	4.46	₹ 6,200.00	₹ 27,652.00
0407	Carriage of material	t	0.080	₹ 110.94	₹ 8.88
	Labour for lowering & laying				
0215	Fitter (grade-1)	Day	0.400	₹ 380.00	₹ 152.00
0214	Fitter (2nd Class)	Day	1.100	₹ 300.00	₹ 330.00
0212	Helper	Day	2.10	₹ 300.00	₹ 630.00
	TOTAL				₹ 28,772.88
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	1.00 %		₹ 287.73
	TOTAL				₹ 29,060.60
	Add for Barricading and Night Lamps and watchman	@	1.35 %		₹ 392.32
	TOTAL				₹ 29,452.92
	Add for Sundries and contingencies	@	3.0%		₹ 883.59
	TOTAL				₹ 30,336.51
	Add 15% for contractor's profit and overheads	@	15%		₹ 4,550.48
	Cost for 4.46 quintal				₹ 34,886.99
	Cost per quintal				₹ 7,822.19
	Say				₹ 7,822.20
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.1	100 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	100 mm dia pipe = 3x75 kg/pipe = 225 kg or 2.25 q				
	Length= 3x 3.66m=10.98 m				
19181	Cost of pipe	metre	10.98	₹ 900.00	₹ 9,882.00
0456	Carriage of pipes	100 metre	10.980	₹ 272.80	₹ 29.95
	Labour for lowering & laying				
0216	Foreman	Day	0.075	₹ 425.00	₹ 31.88
0215	Fitter (grade-1)	Day	0.100	₹ 380.00	₹ 38.00
0212	Helper	Day	0.60	₹ 300.00	₹ 180.00
	TOTAL				₹ 10,161.83
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.80 %		₹ 81.29
	TOTAL				₹ 10,243.12
	Add for Barricading and Night Lamps and watchman	@	0.50 %		₹ 51.22
	TOTAL				₹ 10,294.34
	Add for Sundries and contingencies	@	3.0%		₹ 308.83
	TOTAL				₹ 10,603.17
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,590.48
	Cost for 10.98 metre				₹ 12,193.64
	Cost per metre				₹ 1,110.53
	Say				₹ 1,110.50
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.2	125 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	125 mm dia pipe = 3 x98 kg/pipe = 294 kg or 2.94 q				
	Length= 3x 3.66m=10.98 m				
19182	Cost of pipe	metre	10.98	₹ 1,200.00	₹ 13,176.00
0457	Carriage of pipes	100 metre	10.98	₹ 363.73	₹ 39.94

	Labour for lowering & laying				
0216	Foreman	Day	0.075	₹ 425.00	₹ 31.88
0215	Fitter (grade-1)	Day	0.100	₹ 380.00	₹ 38.00
0212	Helper	Day	0.60	₹ 300.00	₹ 180.00
	TOTAL				₹ 13,465.81
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.60 %		₹ 80.79
	TOTAL				₹ 13,546.61
	Add for Barricading and Night Lamps and watchman	@	0.40 %		₹ 54.19
	TOTAL				₹ 13,600.79
	Add for Sundries and contingencies	@	3.0%		₹ 408.02
	TOTAL				₹ 14,008.82
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,101.32
	Cost for 10.98 metre				₹ 16,110.14
	Cost per metre				₹ 1,467.23
	Say				₹ 1,467.20
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.3	150 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	150 mm dia pipe = 3 x 122 kg/pipe = 366 kg or 3.66 q				
	Length= 3x 3.66 m=10.98 m				
19183	Cost of pipe	metre	10.98	₹ 1,450.00	₹ 15,921.00
0458	Carriage of pipes	100 metre	10.98	₹ 454.67	₹ 49.92
	Labour for lowering & laying				
0216	Foreman	Day	0.150	₹ 225.00	₹ 33.75
0215	Fitter (grade-1)	Day	0.250	₹ 380.00	₹ 95.00
0212	Helper	Day	1.200	₹ 300.00	₹ 360.00
	TOTAL				₹ 16,459.67
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.55 %		₹ 90.53
	TOTAL				₹ 16,550.20
	Add for Barricading and Night Lamps and watchman	@	0.375 %		₹ 62.06
	TOTAL				₹ 16,612.26
	Add for Sundries and contingencies	@	3.0%		₹ 498.37
	TOTAL				₹ 17,110.63
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,566.59
	Cost for 10.98 metre				₹ 19,677.23
	Cost per metre				₹ 1,792.10
	Say				₹ 1,792.10
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.4	200 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	200 mm dia pipe = 3 x 178 kg/pipe = 534 kg or 5.34 q				
	Length= 3x 3.66 m=10.98 m				
19184	Cost of pipe	metre	10.98	₹ 2,400.00	₹ 26,352.00
0459	Carriage of pipes	100 metre	10.98	₹ 737.30	₹ 80.96
	Labour for lowering & laying				
0216	Foreman	Day	0.150	₹ 225.00	₹ 33.75
0215	Fitter (grade-1)	Day	0.400	₹ 380.00	₹ 152.00

0212	Helper	Day	1.650	₹ 300.00	₹ 495.00
	TOTAL				₹ 27,113.71
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.45 %		₹ 122.01
	TOTAL				₹ 27,235.72
	Add for Barricading and Night Lamps and watchman	@	0.60 %		₹ 163.41
	TOTAL				₹ 27,399.13
	Add for Sundries and contingencies	@	3.0%		₹ 821.97
	TOTAL				₹ 28,221.11
	Add 15% for contractor's profit and overheads	@	15%		₹ 4,233.17
	Cost for 10.98 metre				₹ 32,454.27
	Cost per metre				₹ 2,955.76
	Say				₹ 2,955.80
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.5	250 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	250 mm dia pipe = 3 x 240 kg/pipe = 720 kg or 7.20 q				
	Length= 3x 3.66 m=10.98 m				
19185	Cost of pipe	metre	10.98	₹ 3,000.00	₹ 32,940.00
0460	Carriage of pipes	100 metre	10.98	₹ 1,049.23	₹ 115.21
	Labour for lowering & laying				
0216	Foreman	Day	0.200	₹ 225.00	₹ 45.00
0215	Fitter (grade-1)	Day	0.500	₹ 380.00	₹ 190.00
0212	Helper	Day	2.300	₹ 300.00	₹ 690.00
	TOTAL				₹ 33,980.21
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.42 %		₹ 142.72
	TOTAL				₹ 34,122.92
	Add for Barricading and Night Lamps and watchman	@	0.55 %		₹ 187.68
	TOTAL				₹ 34,310.60
	Add for Sundries and contingencies	@	3.0%		₹ 1,029.32
	TOTAL				₹ 35,339.92
	Add 15% for contractor's profit and overheads	@	15%		₹ 5,300.99
	Cost for 10.98 metre				₹ 40,640.90
	Cost per metre				₹ 3,701.36
	Say				₹ 3,701.40
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.6	300 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	300 mm dia pipe = 3 x 310 kg/pipe = 930 kg or 9.30 q				
	Length= 3x 3.66 m=10.98 m				
19186	Cost of pipe	metre	10.98	₹ 4,100.00	₹ 45,018.00
0461	Carriage of pipes	100 metre	10.98	₹ 1,299.05	₹ 142.64
	Labour for lowering & laying				
0216	Foreman	Day	0.250	₹ 225.00	₹ 56.25
0215	Fitter (grade-1)	Day	0.700	₹ 380.00	₹ 266.00
0212	Helper	Day	3.000	₹ 300.00	₹ 900.00
	TOTAL				₹ 46,382.89
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.39 %		₹ 180.89

	TOTAL				₹ 46,563.78
	Add for Barricading and Night Lamps and watchman	@	0.54 %		₹ 251.44
	TOTAL				₹ 46,815.22
	Add for Sundries and contingencies	@	3.0%		₹ 1,404.46
	TOTAL				₹ 48,219.68
	Add 15% for contractor's profit and overheads	@	15%		₹ 7,232.95
	Cost for 10.98 metre				₹ 55,452.63
	Cost per metre				₹ 5,050.33
	Say				₹ 5,050.30
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.7	350 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	350 mm dia pipe = 3 x 390 kg/pipe = 1170 kg or 11.70 q				
	Length= 3x 3.66 m=10.98 m				
19187	Cost of pipe	metre	10.98	₹ 4,950.00	₹ 54,351.00
0462	Carriage of pipes	100 metre	10.98	₹ 1,818.67	₹ 199.69
	Labour for lowering & laying				
0216	Foreman	Day	0.300	₹ 225.00	₹ 67.50
0215	Fitter (grade-1)	Day	0.900	₹ 380.00	₹ 342.00
0212	Helper	Day	3.700	₹ 300.00	₹ 1,110.00
	TOTAL				₹ 56,070.19
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.37 %		₹ 207.46
	TOTAL				₹ 56,277.65
	Add for Barricading and Night Lamps and watchman	@	0.515 %		₹ 289.83
	TOTAL				₹ 56,567.48
	Add for Sundries and contingencies	@	3.0%		₹ 1,697.02
	TOTAL				₹ 58,264.50
	Add 15% for contractor's profit and overheads	@	15%		₹ 8,739.68
	Cost for 10.98 metre				₹ 67,004.18
	Cost per metre				₹ 6,102.38
	Say				₹ 6,102.40
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.8	400 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	400 mm dia pipe = 3 x 474 kg/pipe = 1422 kg or 14.22 q				
	Length= 3x 3.66 m=10.98 m				
19188	Cost of pipe	metre	10.98	₹ 6,500.00	₹ 71,370.00
0463	Carriage of pipes	100 metre	10.98	₹ 2,480.01	₹ 272.31
	Labour for lowering & laying				
0216	Foreman	Day	0.300	₹ 225.00	₹ 67.50
0215	Fitter (grade-1)	Day	1.200	₹ 380.00	₹ 456.00
0212	Helper	Day	4.000	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 73,365.81
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.35 %		₹ 256.78
	TOTAL				₹ 73,622.59
	Add for Barricading and Night Lamps and watchman	@	0.465 %		₹ 342.35
	TOTAL				₹ 73,964.93

	Add for Sundries and contingencies	@	3.0%		₹ 2,218.95
	TOTAL				₹ 76,183.88
	Add 15% for contractor's profit and overheads	@	15%		₹ 11,427.58
	Cost for 10.98 metre				₹ 87,611.46
	Cost per metre				₹ 7,979.19
	Say				₹ 7,979.20
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.9	450 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	450 mm dia pipe = 3 x 572 kg/pipe = 1716 kg or 17.16 q				
	Length= 3x 3.66 m=10.98 m				
19189	Cost of pipe	metre	10.98	₹ 7,900.00	₹ 86,742.00
0464	Carriage of pipes	100 metre	10.98	₹ 3,031.11	₹ 332.82
	Labour for lowering & laying				
0216	Foreman	Day	0.500	₹ 225.00	₹ 112.50
0215	Fitter (grade-1)	Day	1.600	₹ 380.00	₹ 608.00
0212	Helper	Day	5.000	₹ 300.00	₹ 1,500.00
	TOTAL				₹ 89,295.32
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.31 %		₹ 276.82
	TOTAL				₹ 89,572.13
	Add for Barricading and Night Lamps and watchman	@	0.385 %		₹ 344.85
	TOTAL				₹ 89,916.98
	Add for Sundries and contingencies	@	3.0%		₹ 2,697.51
	TOTAL				₹ 92,614.49
	Add 15% for contractor's profit and overheads	@	15%		₹ 13,892.17
	Cost for 10.98 metre				₹ 106,506.67
	Cost per metre				₹ 9,700.06
	Say				₹ 9,700.10
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.10	500 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	500 mm dia pipe = 3 x 671 kg/pipe = 2013 kg or 20.13 q				
	Length= 3x 3.66 m=10.98 m				
19190	Cost of pipe	metre	10.98	₹ 9,100.00	₹ 99,918.00
0465	Carriage of pipes	100 metre	10.98	₹ 3,011.11	₹ 330.62
	Labour for lowering & laying				
0216	Foreman	Day	0.750	₹ 225.00	₹ 168.75
0215	Fitter (grade-1)	Day	1.800	₹ 380.00	₹ 684.00
0212	Helper	Day	5.500	₹ 300.00	₹ 1,650.00
	TOTAL				₹ 102,751.37
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.295 %		₹ 303.12
	TOTAL				₹ 103,054.49
	Add for Barricading and Night Lamps and watchman	@	0.33%		₹ 340.08
	TOTAL				₹ 103,394.57
	Add for Sundries and contingencies	@	3.0%		₹ 3,101.84
	TOTAL				₹ 106,496.40
	Add 15% for contractor's profit and overheads	@	15%		₹ 15,974.46
	Cost for 10.98 metre				₹ 122,470.86

	Cost per metre				₹ 11,153.99
	Say				₹ 11,154.00
19.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536				
19.27.11	600 mm dia, pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying S & SCI pipes for 10.98 m length (3 pipes 3.66 m long) of specified diameter				
	Materials:				
	C.I Pipe class LA				
	600 mm dia pipe = 3 x 671 kg/pipe = 2013 kg or 20.13 q				
	Length= 3x 3.66 m=10.98 m				
19191	Cost of pipe	metre	10.98	₹ 12,800.00	₹ 140,544.00
0466	Carriage of pipes	100 metre	10.98	₹ 4,546.68	₹ 499.23
	Labour for lowering & laying				
0216	Foreman	Day	1.000	₹ 225.00	₹ 225.00
0215	Fitter (grade-1)	Day	2.200	₹ 380.00	₹ 836.00
0212	Helper	Day	7.000	₹ 300.00	₹ 2,100.00
	TOTAL				₹ 144,204.23
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.285 %		₹ 410.98
	TOTAL				₹ 144,615.21
	Add for Barricading and Night Lamps and watchman	@	0.285 %		₹ 412.15
	TOTAL				₹ 145,027.36
	Add for Sundries and contingencies	@	3.0%		₹ 4,350.82
	TOTAL				₹ 149,378.18
	Add 15% for contractor's profit and overheads	@	15%		₹ 22,406.73
	Cost for 10.98 metre				₹ 171,784.91
	Cost per metre				₹ 15,645.26
	Say				₹ 15,645.30
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.1	100 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	100 mm pipe = Spun yarn 0.17x 10 =1.70 kg.	Kilogram	1.70	₹ 43.00	₹ 73.10
11016	Fuel wood	quintal	0.30	₹ 480.00	₹ 144.00
02004	Kerosene oil	litre	0.58	₹ 48.00	₹ 27.84
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	1.00	₹ 380.00	₹ 380.00
0214	Fitter (2nd Class)	Day	1.00	₹ 300.00	₹ 300.00
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
	TOTAL				₹ 1,524.94
	Add for testing joints, Carriage of materials etc.	@	1.50 %		₹ 22.87
	TOTAL				₹ 1,547.81
	Add for Sundries and contingencies	@	3.0%		₹ 46.43
	TOTAL				₹ 1,594.25
	Add for water charges & Electricity	@	1.50%		₹ 23.91
	TOTAL				₹ 1,618.16
	Add 15% for contractor's profit and overheads	@	15%		₹ 242.72
	Cost for 10 nos. joints				₹ 1,860.89
	Cost per joint				₹ 186.09
	Say				₹ 186.10

19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.2	125 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	125 mm pipe = Spun yarn 0.20 x 10 =2.0 kg.	Kilogram	2.00	₹ 43.00	₹ 86.00
11016	Fuel wood	quintal	0.38	₹ 480.00	₹ 182.40
02004	Kerosene oil	litre	0.68	₹ 48.00	₹ 32.64
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	1.50	₹ 380.00	₹ 570.00
0214	Fitter (2nd Class)	Day	1.50	₹ 300.00	₹ 450.00
0212	Helper	Day	3.00	₹ 300.00	₹ 900.00
	TOTAL				₹ 2,221.04
	Add for testing joints, Carriage of materials etc.	@	1.75 %		₹ 38.87
	TOTAL				₹ 2,259.91
	Add for Sundries and contingencies	@	3.0%		₹ 67.80
	TOTAL				₹ 2,327.71
	Add for water charges & Electricity	@	1.50%		₹ 34.92
	TOTAL				₹ 2,362.62
	Add 15% for contractor's profit and overheads	@	15%		₹ 354.39
	Cost for 10 nos. joints				₹ 2,717.01
	Cost per joint				₹ 271.70
	Say				₹ 271.70
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.3	150 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	150 mm pipe = Spun yarn 0.23 x 10 =2.30 kg.	Kilogram	2.30	₹ 43.00	₹ 98.90
11016	Fuel wood	quintal	0.41	₹ 480.00	₹ 196.80
02004	Kerosene oil	litre	0.78	₹ 48.00	₹ 37.44
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	1.50	₹ 380.00	₹ 570.00
0214	Fitter (2nd Class)	Day	1.50	₹ 300.00	₹ 450.00
0212	Helper	Day	3.00	₹ 300.00	₹ 900.00
	TOTAL				₹ 2,253.14
	Add for testing joints, Carriage of materials etc.	@	2.0 %		₹ 45.06
	TOTAL				₹ 2,298.20
	Add for Sundries and contingencies	@	3.0%		₹ 68.95
	TOTAL				₹ 2,367.15
	Add for water charges & Electricity	@	1.50%		₹ 35.51
	TOTAL				₹ 2,402.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 360.40
	Cost for 10 nos. joints				₹ 2,763.05
	Cost per joint				₹ 276.31
	Say				₹ 276.30
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.4	200 mm diameter pipe				

Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	200 mm pipe = Spun yarn 0.3 x 10 =3.0 kg.	Kilogram	3.00	₹ 43.00	₹ 129.00
11016	Fuel wood	quintal	0.60	₹ 480.00	₹ 288.00
02004	Kerosene oil	litre	0.90	₹ 48.00	₹ 43.20
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	2.00	₹ 380.00	₹ 760.00
0214	Fitter (2nd Class)	Day	2.00	₹ 300.00	₹ 600.00
0212	Helper	Day	3.80	₹ 300.00	₹ 1,140.00
	TOTAL				₹ 2,960.20
	Add for testing joints, Carriage of materials etc.	@	2.0 %		₹ 59.20
	TOTAL				₹ 3,019.40
	Add for Sundries and contingencies	@	3.0%		₹ 90.58
	TOTAL				₹ 3,109.99
	Add for water charges & Electricity	@	1.50%		₹ 46.65
	TOTAL				₹ 3,156.64
	Add 15% for contractor's profit and overheads	@	15%		₹ 473.50
	Cost for 10 nos. joints				₹ 3,630.13
	Cost per joint				₹ 363.01
	Say				₹ 363.00
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.5	250 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	250 mm pipe = Spun yarn 0.4 x 10 =4.0 kg.	Kilogram	4.00	₹ 43.00	₹ 172.00
11016	Fuel wood	quintal	0.67	₹ 480.00	₹ 321.60
02004	Kerosene oil	litre	1.15	₹ 48.00	₹ 55.20
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	2.50	₹ 380.00	₹ 950.00
0214	Fitter (2nd Class)	Day	2.50	₹ 300.00	₹ 750.00
0212	Helper	Day	5.00	₹ 300.00	₹ 1,500.00
	TOTAL				₹ 3,748.80
	Add for testing joints, Carriage of materials etc.	@	2.0 %		₹ 74.98
	TOTAL				₹ 3,823.78
	Add for Sundries and contingencies	@	3.0%		₹ 114.71
	TOTAL				₹ 3,938.49
	Add for water charges & Electricity	@	1.50%		₹ 59.08
	TOTAL				₹ 3,997.57
	Add 15% for contractor's profit and overheads	@	15%		₹ 599.63
	Cost for 10 nos. joints				₹ 4,597.20
	Cost per joint				₹ 459.72
	Say				₹ 459.70
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.6	300 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	300 mm pipe = Spun yarn 0.54 x 10 =5.40 kg.	Kilogram	5.40	₹ 43.00	₹ 232.20
11016	Fuel wood	quintal	0.78	₹ 480.00	₹ 374.40
02004	Kerosene oil	litre	1.50	₹ 48.00	₹ 72.00

	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	3.00	₹ 380.00	₹ 1,140.00
0214	Fitter (2nd Class)	Day	3.00	₹ 300.00	₹ 900.00
0212	Helper	Day	5.80	₹ 300.00	₹ 1,740.00
	TOTAL				₹ 4,458.60
	Add for testing joints, Carriage of materials etc.	@	2.0 %		₹ 89.17
	TOTAL				₹ 4,547.77
	Add for Sundries and contingencies	@	3.0%		₹ 136.43
	TOTAL				₹ 4,684.21
	Add for water charges & Electricity	@	1.50%		₹ 70.26
	TOTAL				₹ 4,754.47
	Add 15% for contractor's profit and overheads	@	15%		₹ 713.17
	Cost for 10 nos. joints				₹ 5,467.64
	Cost per joint				₹ 546.76
	Say				₹ 546.80
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.7	350 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	350 mm pipe = Spun yarn 0.62 x 10 =6.20 kg.	Kilogram	6.20	₹ 43.00	₹ 266.60
11016	Fuel wood	quintal	0.90	₹ 480.00	₹ 432.00
02004	Kerosene oil	litre	1.70	₹ 48.00	₹ 81.60
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	3.00	₹ 380.00	₹ 1,140.00
0214	Fitter (2nd Class)	Day	3.00	₹ 300.00	₹ 900.00
0212	Helper	Day	6.00	₹ 300.00	₹ 1,800.00
	TOTAL				₹ 4,620.20
	Add for testing joints, Carriage of materials etc.	@	2.0 %		₹ 92.40
	TOTAL				₹ 4,712.60
	Add for Sundries and contingencies	@	3.0%		₹ 141.38
	TOTAL				₹ 4,853.98
	Add for water charges & Electricity	@	1.50%		₹ 72.81
	TOTAL				₹ 4,926.79
	Add 15% for contractor's profit and overheads	@	15%		₹ 739.02
	Cost for 10 nos. joints				₹ 5,665.81
	Cost per joint				₹ 566.58
	Say				₹ 566.60
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.8	400 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	400 mm pipe = Spun yarn 0.74 x 10 = 7.40 kg.	Kilogram	7.40	₹ 43.00	₹ 318.20
11016	Fuel wood	quintal	1.15	₹ 480.00	₹ 552.00
02004	Kerosene oil	litre	1.70	₹ 48.00	₹ 81.60
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	4.00	₹ 380.00	₹ 1,520.00
0214	Fitter (2nd Class)	Day	4.00	₹ 300.00	₹ 1,200.00
0212	Helper	Day	7.70	₹ 300.00	₹ 2,310.00
	TOTAL				₹ 5,981.80
	Add for testing joints, Carriage of materials etc.	@	2.0 %		₹ 119.64

	TOTAL				₹ 6,101.44
	Add for Sundries and contingencies	@	3.0%		₹ 183.04
	TOTAL				₹ 6,284.48
	Add for water charges & Electricity	@	1.50%		₹ 94.27
	TOTAL				₹ 6,378.75
	Add 15% for contractor's profit and overheads	@	15%		₹ 956.81
	Cost for 10 nos. joints				₹ 7,335.56
	Cost per joint				₹ 733.56
	Say				₹ 733.60
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.9	450 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	450 mm pipe = Spun yarn 0.79 x 10 = 7.90 kg.	Kilogram	7.90	₹ 43.00	₹ 339.70
11016	Fuel wood	quintal	1.15	₹ 480.00	₹ 552.00
02004	Kerosene oil	litre	2.15	₹ 48.00	₹ 103.20
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	4.50	₹ 380.00	₹ 1,710.00
0214	Fitter (2nd Class)	Day	4.50	₹ 300.00	₹ 1,350.00
0212	Helper	Day	9.00	₹ 300.00	₹ 2,700.00
	TOTAL				₹ 6,754.90
	Add for testing joints, Carriage of materials etc.	@	1.80 %		₹ 121.59
	TOTAL				₹ 6,876.49
	Add for Sundries and contingencies	@	3.0%		₹ 206.29
	TOTAL				₹ 7,082.78
	Add for water charges & Electricity	@	1.50%		₹ 106.24
	TOTAL				₹ 7,189.02
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,078.35
	Cost for 10 nos. joints				₹ 8,267.38
	Cost per joint				₹ 826.74
	Say				₹ 826.70
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.10	500 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	500 mm pipe = Spun yarn 0.85 x 10 = 8.50 kg.	Kilogram	8.50	₹ 43.00	₹ 365.50
11016	Fuel wood	quintal	1.35	₹ 480.00	₹ 648.00
02004	Kerosene oil	litre	2.30	₹ 48.00	₹ 110.40
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	4.75	₹ 380.00	₹ 1,805.00
0214	Fitter (2nd Class)	Day	4.75	₹ 300.00	₹ 1,425.00
0212	Helper	Day	9.50	₹ 300.00	₹ 2,850.00
	TOTAL				₹ 7,203.90
	Add for testing joints, Carriage of materials etc.	@	1.80 %		₹ 129.67
	TOTAL				₹ 7,333.57
	Add for Sundries and contingencies	@	3.0%		₹ 220.01
	TOTAL				₹ 7,553.58
	Add for water charges & Electricity	@	1.50%		₹ 113.30
	TOTAL				₹ 7,666.88
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,150.03

	Cost for 10 nos. joints				₹ 8,816.91
	Cost per joint				₹ 881.69
	Say				₹ 881.70
19.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
19.28.11	600 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing lead caulked joints total 10 Nos.				
	Materials :-				
19056	600 mm pipe = Spun yarn 1.02 x 10 = 10.20 kg.	Kilogram	8.50	₹ 43.00	₹ 365.50
11016	Fuel wood	quintal	1.70	₹ 480.00	₹ 816.00
02004	Kerosene oil	litre	2.75	₹ 48.00	₹ 132.00
	Labour for Lead Caulking				
0215	Fitter (grade-1)	Day	6.50	₹ 380.00	₹ 2,470.00
0214	Fitter (2nd Class)	Day	6.50	₹ 300.00	₹ 1,950.00
0212	Helper	Day	13.00	₹ 300.00	₹ 3,900.00
	TOTAL				₹ 9,633.50
	Add for testing joints, Carriage of materials etc.	@	2.0 %		₹ 192.67
	TOTAL				₹ 9,826.17
	Add for Sundries and contingencies	@	3.0%		₹ 294.79
	TOTAL				₹ 10,120.96
	Add for water charges & Electricity	@	1.50%		₹ 151.81
	TOTAL				₹ 10,272.77
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,540.92
	Cost for 10 nos. joints				₹ 11,813.68
	Cost per joint				₹ 1,181.37
	Say				₹ 1,181.40
19.29	Supplying pig lead at site of work.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 quintal				
	materials-				
1397	Pig Lead	kg	100.00	₹ 140.00	₹ 14,000.00
0433	Carrigae	tonne	0.10	₹ 110.94	₹ 11.09
	TOTAL				₹ 14,011.09
	Add for Sundries and contingencies		3.0%		₹ 420.33
	TOTAL				₹ 14,431.43
	Add 15% for contractor's profit and overheads		15%		₹ 2,164.71
	Cost of one quintal				₹ 16,596.14
	Say				₹ 16,596.10
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
19.30.1	80 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19012	Rubber insertion 3mm thick required for 10 joints	each	10.00	₹ 13.00	₹ 130.00
19079	Bolts and nuts 16mm dia, 60 mmlong	each	40.00	₹ 12.00	₹ 480.00
	Labour-				
0215	Fitter (grade-1)	Day	0.15	₹ 380.00	₹ 57.00
0214	Fitter (2nd Class)	Day	0.15	₹ 300.00	₹ 45.00
0212	Helper	Day	0.80	₹ 300.00	₹ 240.00
	TOTAL				₹ 952.00
	Add for Carriage of materials, testing joints & white lead etc.	@	1.50 %		₹ 14.28
	TOTAL				₹ 966.28
	Add for Sundries and contingencies	@	3.0%		₹ 28.99
	TOTAL				₹ 995.27
	Add for water charges & Electricity	@	1.50%		₹ 14.93
	TOTAL				₹ 1,010.20

	Add 15% for contractor's profit and overheads	@	15%		₹ 151.53
	Cost for 10 nos. joints				₹ 1,161.73
	Cost per joint				₹ 116.17
	Say				₹ 116.20
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.2	100 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19013	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 17.00	₹ 170.00
19079	Bolts and nuts 16mm dia, 60 mmlong	each	80.00	₹ 12.00	₹ 960.00
	Labour-				
0215	Fitter (grade-1)	Day	0.25	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.25	₹ 300.00	₹ 75.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 1,600.00
	Add for Carriage of materials, testing joints & white lead etc.	@	1.50 %		₹ 24.00
	TOTAL				₹ 1,624.00
	Add for Sundries and contingencies	@	3.0%		₹ 48.72
	TOTAL				₹ 1,672.72
	Add for water charges & Electricity	@	1.50%		₹ 25.09
	TOTAL				₹ 1,697.81
	Add 15% for contractor's profit and overheads	@	15%		₹ 254.67
	Cost for 10 nos. joints				₹ 1,952.48
	Cost per joint				₹ 195.25
	Say				₹ 195.20
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.3	125 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19014	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 19.00	₹ 190.00
19080	Bolts and nuts 16mm dia, 65 mm long	each	80.00	₹ 12.00	₹ 960.00
	Labour-				
0215	Fitter (grade-1)	Day	0.25	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.25	₹ 300.00	₹ 75.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 1,620.00
	Add for Carriage of materials, testing joints & white lead etc.	@	1.70 %		₹ 27.54
	TOTAL				₹ 1,647.54
	Add for Sundries and contingencies	@	3.0%		₹ 49.43
	TOTAL				₹ 1,696.97
	Add for water charges & Electricity	@	1.50%		₹ 25.45
	TOTAL				₹ 1,722.42
	Add 15% for contractor's profit and overheads	@	15%		₹ 258.36
	Cost for 10 nos. joints				₹ 1,980.78
	Cost per joint				₹ 198.08
	Say				₹ 198.10
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.4	150 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				

	Materials :-				
19015	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 22.00	₹ 220.00
19081	Bolts and nuts 20 mm dia, 65 mm long	each	80.00	₹ 17.00	₹ 1,360.00
	Labour-				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0214	Fitter (2nd Class)	Day	0.30	₹ 300.00	₹ 90.00
0212	Helper	Day	1.10	₹ 300.00	₹ 330.00
	TOTAL				₹ 2,114.00
	Add for Carriage of materials, testing joints & white lead etc.	@	2.0 %		₹ 42.28
	TOTAL				₹ 2,156.28
	Add for Sundries and contingencies	@	3.0%		₹ 64.69
	TOTAL				₹ 2,220.97
	Add for water charges & Electricity	@	1.50%		₹ 33.31
	TOTAL				₹ 2,254.28
	Add 15% for contractor's profit and overheads	@	15%		₹ 338.14
	Cost for 10 nos. joints				₹ 2,592.43
	Cost per joint				₹ 259.24
	Say				₹ 259.20
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.5	200 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19016	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 29.00	₹ 290.00
19082	Bolts and nuts 20 mm dia, 70 mm long	each	80.00	₹ 17.00	₹ 1,360.00
	Labour-				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0214	Fitter (2nd Class)	Day	0.30	₹ 300.00	₹ 90.00
0212	Helper	Day	1.10	₹ 300.00	₹ 330.00
	TOTAL				₹ 2,184.00
	Add for Carriage of materials, testing joints & white lead etc.	@	3.0 %		₹ 65.52
	TOTAL				₹ 2,249.52
	Add for Sundries and contingencies	@	3.0%		₹ 67.49
	TOTAL				₹ 2,317.01
	Add for water charges & Electricity	@	1.50%		₹ 34.76
	TOTAL				₹ 2,351.76
	Add 15% for contractor's profit and overheads	@	15%		₹ 352.76
	Cost for 10 nos. joints				₹ 2,704.52
	Cost per joint				₹ 270.45
	Say				₹ 270.50
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.6	250 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19017	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 44.00	₹ 440.00
19083	Bolts and nuts 20 mm dia, 75 mm long	each	120.00	₹ 17.00	₹ 2,040.00
	Labour-				
0215	Fitter (grade-1)	Day	0.40	₹ 380.00	₹ 152.00
0214	Fitter (2nd Class)	Day	0.40	₹ 300.00	₹ 120.00
0212	Helper	Day	1.30	₹ 300.00	₹ 390.00
	TOTAL				₹ 3,142.00
	Add for Carriage of materials, testing joints & white lead etc.	@	2.50 %		₹ 78.55

	TOTAL				₹	3,220.55
	Add for Sundries and contingencies	@	3.0%		₹	96.62
	TOTAL				₹	3,317.17
	Add for water charges & Electricity	@	1.50%		₹	49.76
	TOTAL				₹	3,366.92
	Add 15% for contractor's profit and overheads	@	15%		₹	505.04
	Cost for 10 nos. joints				₹	3,871.96
	Cost per joint				₹	387.20
	Say				₹	387.20
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :					
	testing of joints :					
19.30.7	300 mm diameter pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 joints					
	Materials :-					
19018	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 55.00	₹	550.00
19083	Bolts and nuts 20 mm dia, 75 mm long	each	120.00	₹ 17.00	₹	2,040.00
	Labour-					
0215	Fitter (grade-1)	Day	0.40	₹ 380.00	₹	152.00
0214	Fitter (2nd Class)	Day	0.40	₹ 300.00	₹	120.00
0212	Helper	Day	1.30	₹ 300.00	₹	390.00
	TOTAL				₹	3,252.00
	Add for Carriage of materials, testing joints & white lead etc.	@	2.50 %		₹	81.30
	TOTAL				₹	3,333.30
	Add for Sundries and contingencies	@	3.0%		₹	100.00
	TOTAL				₹	3,433.30
	Add for water charges & Electricity	@	1.50%		₹	51.50
	TOTAL				₹	3,484.80
	Add 15% for contractor's profit and overheads	@	15%		₹	522.72
	Cost for 10 nos. joints				₹	4,007.52
	Cost per joint				₹	400.75
	Say				₹	400.80
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :					
	testing of joints :					
19.30.8	350 mm diameter pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 joints					
	Materials :-					
19019	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 66.00	₹	660.00
19084	Bolts and nuts 20 mm dia, 80 mm long	each	160.00	₹ 19.00	₹	3,040.00
	Labour-					
0215	Fitter (grade-1)	Day	0.50	₹ 380.00	₹	190.00
0214	Fitter (2nd Class)	Day	0.50	₹ 300.00	₹	150.00
0212	Helper	Day	1.40	₹ 300.00	₹	420.00
	TOTAL				₹	4,460.00
	Add for Carriage of materials, testing joints & white lead etc.	@	2.0 %		₹	89.20
	TOTAL				₹	4,549.20
	Add for Sundries and contingencies	@	3.0%		₹	136.48
	TOTAL				₹	4,685.68
	Add for water charges & Electricity	@	1.50%		₹	70.29
	TOTAL				₹	4,755.96
	Add 15% for contractor's profit and overheads	@	15%		₹	713.39
	Cost for 10 nos. joints				₹	5,469.36
	Cost per joint				₹	546.94
	Say				₹	546.90

19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.9	400 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19020	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 96.00	₹ 960.00
19085	Bolts and nuts 24 mm dia 85 mm long	each	160.00	₹ 34.00	₹ 5,440.00
	Labour-				
0215	Fitter (grade-1)	Day	0.50	₹ 380.00	₹ 190.00
0214	Fitter (2nd Class)	Day	0.50	₹ 300.00	₹ 150.00
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 7,190.00
	Add for Carriage of materials, testing joints & white lead etc.	@	1.25 %		₹ 89.88
	TOTAL				₹ 7,279.88
	Add for Sundries and contingencies	@	3.0%		₹ 218.40
	TOTAL				₹ 7,498.27
	Add for water charges & Electricity	@	1.50%		₹ 112.47
	TOTAL				₹ 7,610.75
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,141.61
	Cost for 10 nos. joints				₹ 8,752.36
	Cost per joint				₹ 875.24
	Say				₹ 875.20
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.10	450 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19021	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 120.00	₹ 1,200.00
19085	Bolts and nuts 24 mm dia 85 mm long	each	200.00	₹ 34.00	₹ 6,800.00
	Labour-				
0215	Fitter (grade-1)	Day	0.60	₹ 380.00	₹ 228.00
0214	Fitter (2nd Class)	Day	0.60	₹ 300.00	₹ 180.00
0212	Helper	Day	1.75	₹ 300.00	₹ 525.00
	TOTAL				₹ 8,933.00
	Add for Carriage of materials, testing joints & white lead etc.	@	1.30 %		₹ 116.13
	TOTAL				₹ 9,049.13
	Add for Sundries and contingencies	@	3.0%		₹ 271.47
	TOTAL				₹ 9,320.60
	Add for water charges & Electricity	@	1.50%		₹ 139.81
	TOTAL				₹ 9,460.41
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,419.06
	Cost for 10 nos. joints				₹ 10,879.47
	Cost per joint				₹ 1,087.95
	Say				₹ 1,087.90
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.11	500 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19022	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 154.00	₹ 1,540.00
19086	Bolts and nuts 24 mm dia 90 mm long	each	200.00	₹ 37.00	₹ 7,400.00
	Labour-				
0215	Fitter (grade-1)	Day	0.65	₹ 380.00	₹ 247.00

0214	Fitter (2nd Class)	Day	0.65	₹ 300.00	₹ 195.00
0212	Helper	Day	1.80	₹ 300.00	₹ 540.00
	TOTAL				₹ 9,922.00
	Add for Carriage of materials, testing joints & white lead etc.	@	1.30 %		₹ 128.99
	TOTAL				₹ 10,050.99
	Add for Sundries and contingencies	@	3.0%		₹ 301.53
	TOTAL				₹ 10,352.52
	Add for water charges & Electricity	@	1.50%		₹ 155.29
	TOTAL				₹ 10,507.80
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,576.17
	Cost for 10 nos. joints				₹ 12,083.97
	Cost per joint				₹ 1,208.40
	Say				₹ 1,208.40
19.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :				
	testing of joints :				
19.30.12	600 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 joints				
	Materials :-				
19023	Rubber insertion 3 mm thick required for 10 joints	each	10.00	₹ 171.00	₹ 1,710.00
19087	Bolts and nuts 27 mm dia 100 mm long	each	200.00	₹ 43.00	₹ 8,600.00
	Labour-				
0215	Fitter (grade-1)	Day	0.75	₹ 380.00	₹ 285.00
0214	Fitter (2nd Class)	Day	0.75	₹ 300.00	₹ 225.00
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
	TOTAL				₹ 11,420.00
	Add for Carriage of materials, testing joints & white lead etc.	@	1.40 %		₹ 159.88
	TOTAL				₹ 11,579.88
	Add for Sundries and contingencies	@	3.0%		₹ 347.40
	TOTAL				₹ 11,927.28
	Add for water charges & Electricity	@	1.50%		₹ 178.91
	TOTAL				₹ 12,106.19
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,815.93
	Cost for 10 nos. joints				₹ 13,922.11
	Cost per joint				₹ 1,392.21
	Say				₹ 1,392.20
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.1	100 mm diameter				
19.31.1.1	Class I				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19073	100mm dia. sluice valves class-I (with cap)	each	10.00	₹ 2,705.00	₹ 27,050.00
	Carriage of sluice valves				
0407	100 mm dia valve wt.=10 x 44.30 kg =443.00 kg= 4.43 q = 0.443 t. say 0.44 t	tonne	0.44	₹ 110.94	₹ 48.81
19013	Rubber insertion 3 mm thick	each	10.00	₹ 17.00	₹ 170.00
19079	Bolts and nuts 16 mm dia 60 mm long	each	160.00	₹ 12.00	₹ 1,920.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.93	₹ 380.00	₹ 353.40
0214	Fitter (2nd Class)	Day	0.62	₹ 300.00	₹ 186.00
0212	Helper	Day	2.48	₹ 300.00	₹ 744.00

	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.25	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.25	₹ 300.00	₹ 75.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
TOTAL					₹ 30,942.21
	Add for carriage of other materials testing joints & white lead etc.	@	0.16 %		₹ 49.51
	TOTAL				₹ 30,991.72
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.225 %		₹ 69.73
	TOTAL				₹ 31,061.45
	Add for Sundries and contingencies	@	3.0%		₹ 931.84
	TOTAL				₹ 31,993.30
	Add 15% for contractor's profit and overheads	@	15%		₹ 4,798.99
	Cost for 10 nos.sluiice valve				₹ 36,792.29
	Cost per valve				₹ 3,679.23
	Say				₹ 3,679.20
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.1	100 mm diameter				
19.31.1.2	Class II				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19094	100mm dia. sluice valves class-II (with cap)	each	10.00	₹ 2,791.00	₹ 27,910.00
	Carriage of sluice valves				
0407	100 mm dia class-II 10 valve wt.=10 x 56.30 kg = 563.00 kg=5.63 q = 0.563 t. say 0.56 t	tonne	0.563	₹ 110.94	₹ 62.46
19013	Rubber insertion 3 mm thick	each	10.00	₹ 17.00	₹ 170.00
19079	Bolts and nuts 16 mm dia 60 mm long	each	160.00	₹ 12.00	₹ 1,920.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.93	₹ 380.00	₹ 353.40
0214	Fitter (2nd Class)	Day	0.62	₹ 300.00	₹ 186.00
0212	Helper	Day	2.48	₹ 300.00	₹ 744.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.25	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.25	₹ 300.00	₹ 75.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
TOTAL					₹ 31,815.86
	Add for carriage of other materials testing joints & white lead etc.	@	0.15 %		₹ 47.72
	TOTAL				₹ 31,863.58
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.20 %		₹ 63.73
	TOTAL				₹ 31,927.31
	Add for Sundries and contingencies	@	3.0%		₹ 957.82
	TOTAL				₹ 32,885.13
	Add 15% for contractor's profit and overheads	@	15%		₹ 4,932.77
	Cost for 10 nos.sluiice valve				₹ 37,817.90
	Cost per valve				₹ 3,781.79
	Say				₹ 3,781.80
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.2	125 mm diameter				
19.31.2.1	Class I				
Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 10 sluice valves				
	Materials :-				
19074	125 mm dia. sluice valves class-I (with cap)	each	10.00	₹ 3,385.00	₹ 33,850.00
	Carriage of sluice valves				
0407	125 mm dia class-I 10 valve wt.=10 x 56.30 kg = 563.00 kg=5.63 q = 0.563 t. say 0.56 t	tonne	0.563	₹ 110.94	₹ 62.46
19014	Rubber insertion 3 mm thick	each	10.00	₹ 19.00	₹ 190.00
19080	Bolts and nuts 16 mm dia 65 mm long	each	160.00	₹ 12.00	₹ 1,920.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.93	₹ 380.00	₹ 353.40
0214	Fitter (2nd Class)	Day	0.62	₹ 300.00	₹ 186.00
0212	Helper	Day	2.48	₹ 300.00	₹ 744.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.25	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.25	₹ 300.00	₹ 75.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
TOTAL					₹ 37,775.86
	Add for carriage of other materials testing joints & white lead etc.	@	0.15 %		₹ 56.66
	TOTAL				₹ 37,832.52
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.20 %		₹ 75.67
	TOTAL				₹ 37,908.19
	Add for Sundries and contingencies	@	3.0%		₹ 1,137.25
	TOTAL				₹ 39,045.43
	Add 15% for contractor's profit and overheads	@	15%		₹ 5,856.82
	Cost for 10 nos.sluice valve				₹ 44,902.25
	Cost per valve				₹ 4,490.22
	Say				₹ 4,490.20
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.2	125 mm diameter				
19.31.2.2	Class II				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19095	125 mm dia. sluice valves class-II (with cap)	each	10.00	₹ 3,528.00	₹ 35,280.00
	Carriage of sluice valves				
0407	125 mm dia class-II 10 valve wt.=10 x 68.30 kg = 683.00 kg=6.83 q = 0.683 t.	tonne	0.683	₹ 110.94	₹ 75.77
19014	Rubber insertion 3 mm thick	each	10.00	₹ 19.00	₹ 190.00
19080	Bolts and nuts 16 mm dia 65 mm long	each	160.00	₹ 12.00	₹ 1,920.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.93	₹ 380.00	₹ 353.40
0214	Fitter (2nd Class)	Day	0.62	₹ 300.00	₹ 186.00
0212	Helper	Day	2.48	₹ 300.00	₹ 744.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0214	Fitter (2nd Class)	Day	0.30	₹ 300.00	₹ 90.00
0212	Helper	Day	1.10	₹ 300.00	₹ 330.00
TOTAL					₹ 39,283.17
	Add for carriage of other materials testing joints & white lead etc.	@	0.15 %		₹ 58.92
	TOTAL				₹ 39,342.10
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.20 %		₹ 78.68
	TOTAL				₹ 39,420.78
	Add for Sundries and contingencies	@	3.0%		₹ 1,182.62

	TOTAL				₹ 40,603.40
	Add 15% for contractor's profit and overheads	@	15%		₹ 6,090.51
	Cost for 10 nos.sluiice valve				₹ 46,693.92
	Cost per valve				₹ 4,669.39
	Say				₹ 4,669.40
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.3	150 mm diameter				
19.31.3.1	Class I				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19075	150 mm dia. sluice valves class-I (with cap)	each	10.00	₹ 4,064.00	₹ 40,640.00
	Carriage of sluice valves				
0407	150 mm dia class-I ,10 valve wt.=10 x 72.50 kg = 725.00 kg=7.25 q = 0.725 t.	tonne	0.725	₹ 110.94	₹ 80.43
19015	Rubber insertion 3 mm thick	each	10.00	₹ 22.00	₹ 220.00
19081	Bolts and nuts 20 mm dia 65 mm long	each	160.00	₹ 17.00	₹ 2,720.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.93	₹ 380.00	₹ 353.40
0214	Fitter (2nd Class)	Day	0.62	₹ 300.00	₹ 186.00
0212	Helper	Day	2.48	₹ 300.00	₹ 744.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0214	Fitter (2nd Class)	Day	0.30	₹ 300.00	₹ 90.00
0212	Helper	Day	1.10	₹ 300.00	₹ 330.00
TOTAL					₹ 45,477.83
	Add for carriage of other materials testing joints & white lead etc.	@	0.15 %		₹ 68.22
	TOTAL				₹ 45,546.05
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.19 %		₹ 86.54
	TOTAL				₹ 45,632.59
	Add for Sundries and contingencies	@	3.0%		₹ 1,368.98
	TOTAL				₹ 47,001.56
	Add 15% for contractor's profit and overheads	@	15%		₹ 7,050.23
	Cost for 10 nos.sluiice valve				₹ 54,051.80
	Cost per valve				₹ 5,405.18
	Say				₹ 5,405.20
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.3	150 mm diameter				
19.31.3.2	Class II				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19096	150 mm dia. sluice valves class-II (with cap)	each	10.00	₹ 4,293.00	₹ 42,930.00
	Carriage of sluice valves				
0407	150 mm dia class-II ,10 valve wt.=10 x 72.50 kg = 725.00 kg=7.25 q = 0.725 t.	tonne	0.725	₹ 110.94	₹ 80.43
19015	Rubber insertion 3 mm thick	each	10.00	₹ 22.00	₹ 220.00
19081	Bolts and nuts 20 mm dia 65 mm long	each	160.00	₹ 17.00	₹ 2,720.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.93	₹ 380.00	₹ 353.40
0214	Fitter (2nd Class)	Day	0.62	₹ 300.00	₹ 186.00
0212	Helper	Day	2.48	₹ 300.00	₹ 744.00

	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.30	₹ 380.00	₹ 114.00
0214	Fitter (2nd Class)	Day	0.30	₹ 300.00	₹ 90.00
0212	Helper	Day	1.10	₹ 300.00	₹ 330.00
TOTAL					₹ 47,767.83
	Add for carriage of other materials testing joints & white lead etc.	@	0.15 %		₹ 71.65
	TOTAL				₹ 47,839.48
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.175 %		₹ 83.72
	TOTAL				₹ 47,923.20
	Add for Sundries and contingencies	@	3.0%		₹ 1,437.70
	TOTAL				₹ 49,360.90
	Add 15% for contractor's profit and overheads	@	15%		₹ 7,404.13
	Cost for 10 nos.sluiice valve				₹ 56,765.03
	Cost per valve				₹ 5,676.50
	Say				₹ 5,676.50
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.4	200 mm diameter				
19.31.4.1	Class I				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19076	200 mm dia. sluice valves class-I (with cap)	each	10.00	₹ 7,735.00	₹ 77,350.00
	Carriage of sluice valves				
0407	200 mm dia class-I , 10 valve wt.=10 x 121.50 kg = 1215.00 kg=12.15 q = 1.215 t.	tonne	1.215	₹ 110.94	₹ 134.79
19016	Rubber insertion 3 mm thick	each	10.00	₹ 29.00	₹ 290.00
19082	Bolts and nuts 20 mm dia 70 mm long	each	160.00	₹ 17.00	₹ 2,720.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.50	₹ 380.00	₹ 190.00
0214	Fitter (2nd Class)	Day	2.00	₹ 300.00	₹ 600.00
0212	Helper	Day	6.00	₹ 300.00	₹ 1,800.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.35	₹ 380.00	₹ 133.00
0214	Fitter (2nd Class)	Day	0.75	₹ 300.00	₹ 225.00
0212	Helper	Day	1.10	₹ 300.00	₹ 330.00
TOTAL					₹ 83,772.79
	Add for carriage of other materials testing joints & white lead etc.	@	0.10 %		₹ 83.77
	TOTAL				₹ 83,856.56
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.12 %		₹ 100.63
	TOTAL				₹ 83,957.19
	Add for Sundries and contingencies	@	3.0%		₹ 2,518.72
	TOTAL				₹ 86,475.91
	Add 15% for contractor's profit and overheads	@	15%		₹ 12,971.39
	Cost for 10 nos.sluiice valve				₹ 99,447.29
	Cost per valve				₹ 9,944.73
	Say				₹ 9,944.70
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.4	200 mm diameter				
19.31.4.2	Class II				
Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 10 sluice valves				
	Materials :-				
19097	200 mm dia. sluice valves class-II (with cap)	each	10.00	₹ 8,300.00	₹ 83,000.00
	Carriage of sluice valves				
0407	200 mm dia class-II ,10 valve wt.=10 x 150.50 kg = 1505.00 kg=15.05 q = 1.505 t.	tonne	1.505	₹ 110.94	₹ 166.96
19016	Rubber insertion 3 mm thick	each	10.00	₹ 29.00	₹ 290.00
19082	Bolts and nuts 20 mm dia 65 mm long	each	160.00	₹ 17.00	₹ 2,720.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.50	₹ 380.00	₹ 190.00
0214	Fitter (2nd Class)	Day	2.00	₹ 300.00	₹ 600.00
0212	Helper	Day	6.50	₹ 300.00	₹ 1,950.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.35	₹ 380.00	₹ 133.00
0214	Fitter (2nd Class)	Day	0.75	₹ 300.00	₹ 225.00
0212	Helper	Day	1.10	₹ 300.00	₹ 330.00
TOTAL					₹ 89,604.96
	Add for carriage of other materials testing joints & white lead etc.	@	0.10 %		₹ 89.60
	TOTAL				₹ 89,694.57
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.11 %		₹ 98.66
	TOTAL				₹ 89,793.23
	Add for Sundries and contingencies	@	3.0%		₹ 2,693.80
	TOTAL				₹ 92,487.03
	Add 15% for contractor's profit and overheads	@	15%		₹ 13,873.05
	Cost for 10 nos.sluite valve				₹ 106,360.09
	Cost per valve				₹ 10,636.01
	Say				₹ 10,636.00
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.5	250 mm diameter				
19.31.5.1	Class I				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19077	250 mm dia. sluice valves class-I (with cap)	each	10.00	₹ 11,520.00	₹ 115,200.00
	Carriage of sluice valves				
0407	250 mm dia class-II ,10 valve wt.=10 x 179.90 kg = 1799.00 kg=17.99 q = say, 1.80 t.	tonne	1.800	₹ 110.94	₹ 199.69
19017	Rubber insertion 3 mm thick	each	10.00	₹ 44.00	₹ 440.00
19083	Bolts and nuts 20 mm dia 75 mm long	each	240.00	₹ 17.00	₹ 4,080.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.55	₹ 380.00	₹ 209.00
0214	Fitter (2nd Class)	Day	2.50	₹ 300.00	₹ 750.00
0212	Helper	Day	8.75	₹ 300.00	₹ 2,625.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.40	₹ 380.00	₹ 152.00
0214	Fitter (2nd Class)	Day	0.80	₹ 300.00	₹ 240.00
0212	Helper	Day	1.30	₹ 300.00	₹ 390.00
TOTAL					₹ 124,285.69
	Add for carriage of other materials testing joints & white lead etc.	@	0.08 %		₹ 99.43
	TOTAL				₹ 124,385.12
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.10 %		₹ 124.39
	TOTAL				₹ 124,509.51
	Add for Sundries and contingencies	@	3.0%		₹ 3,735.29

	TOTAL				₹ 128,244.79
	Add 15% for contractor's profit and overheads	@	15%		₹ 19,236.72
	Cost for 10 nos.sluiice valve				₹ 147,481.51
	Cost per valve				₹ 14,748.15
	Say				₹ 14,748.20
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.5	250 mm diameter				
19.31.5.2	Class II				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19098	250 mm dia. sluice valves class-II (with cap)	each	10.00	₹ 11,734.00	₹ 117,340.00
	Carriage of sluice valves				
0407	250 mm dia class-II ,10 valve wt.=10 x 229.90 kg = 2299.00 kg 22.99 q = say, 2.30 t.	tonne	2.300	₹ 110.94	₹ 255.16
19017	Rubber insertion 3 mm thick	each	10.00	₹ 44.00	₹ 440.00
19083	Bolts and nuts 20 mm dia 75 mm long	each	240.00	₹ 17.00	₹ 4,080.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.55	₹ 380.00	₹ 209.00
0214	Fitter (2nd Class)	Day	2.50	₹ 300.00	₹ 750.00
0212	Helper	Day	9.25	₹ 300.00	₹ 2,775.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.40	₹ 380.00	₹ 152.00
0214	Fitter (2nd Class)	Day	0.90	₹ 300.00	₹ 270.00
0212	Helper	Day	1.20	₹ 300.00	₹ 360.00
TOTAL					₹ 126,631.16
	Add for carriage of other materials testing joints & white lead etc.	@	0.08 %		₹ 101.30
	TOTAL				₹ 126,732.47
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.085 %		₹ 107.72
	TOTAL				₹ 126,840.19
	Add for Sundries and contingencies	@	3.0%		₹ 3,805.21
	TOTAL				₹ 130,645.40
	Add 15% for contractor's profit and overheads	@	15%		₹ 19,596.81
	Cost for 10 nos.sluiice valve				₹ 150,242.20
	Cost per valve				₹ 15,024.22
	Say				₹ 15,024.20
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.6	300 mm diameter				
19.31.6.1	Class I				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19078	300 mm dia. sluice valves class-I (with cap)	each	10.00	₹ 14,196.00	₹ 141,960.00
	Carriage of sluice valves				
0407	300 mm dia class-I ,10 valve wt.=10 x 242.40 kg = 2424.00 kg=24.24 q = say, 2.424 t.	tonne	2.424	₹ 110.94	₹ 268.92
19018	Rubber insertion 3 mm thick	each	10.00	₹ 55.00	₹ 550.00
19083	Bolts and nuts 20 mm dia 75 mm long	each	240.00	₹ 17.00	₹ 4,080.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.6	₹ 380.00	₹ 228.00
0214	Fitter (2nd Class)	Day	3.00	₹ 300.00	₹ 900.00
0212	Helper	Day	13.00	₹ 300.00	₹ 3,900.00

	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.50	₹ 380.00	₹ 190.00
0214	Fitter (2nd Class)	Day	1.00	₹ 300.00	₹ 300.00
0212	Helper	Day	1.40	₹ 300.00	₹ 420.00
TOTAL					₹ 152,796.92
	Add for carriage of other materials testing joints & white lead etc.	@	0.08 %		₹ 122.24
	TOTAL				₹ 152,919.16
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.09 %		₹ 137.63
	TOTAL				₹ 153,056.78
	Add for Sundries and contingencies	@	3.0%		₹ 4,591.70
	TOTAL				₹ 157,648.49
	Add 15% for contractor's profit and overheads	@	15%		₹ 23,647.27
	Cost for 10 nos.sluiice valve				₹ 181,295.76
	Cost per valve				₹ 18,129.58
	Say				₹ 18,129.60
19.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
19.31.6	300 mm diameter				
19.31.6.2	Class II				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 sluice valves				
	Materials :-				
19099	300 mm dia. sluice valves class-II (with cap)	each	10.00	₹ 14,668.00	₹ 146,680.00
	Carriage of sluice valves				
0407	300 mm dia class-II, 10 valve wt.=10 x 303.40 kg = 3034.00 kg=30.34 q = say, 3.034 t.	tonne	3.030	₹ 110.94	₹ 336.15
19018	Rubber insertion 3 mm thick	each	10.00	₹ 55.00	₹ 550.00
19083	Bolts and nuts 20 mm dia 75 mm long	each	240.00	₹ 17.00	₹ 4,080.00
	Labour:				
	For lowering & laying				
0215	Fitter (grade-1)	Day	0.6	₹ 380.00	₹ 228.00
0214	Fitter (2nd Class)	Day	3.00	₹ 300.00	₹ 900.00
0212	Helper	Day	14.00	₹ 300.00	₹ 4,200.00
	Labour:				
	For Joining				
0215	Fitter (grade-1)	Day	0.50	₹ 380.00	₹ 190.00
0214	Fitter (2nd Class)	Day	1.00	₹ 300.00	₹ 300.00
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
TOTAL					₹ 157,914.15
	Add for carriage of other materials testing joints & white lead etc.	@	0.06 %		₹ 94.75
	TOTAL				₹ 158,008.90
	Add for Ropes, Ballies,Pulleys, Crow bars etc. for lowering.	@	0.065 %		₹ 102.71
	TOTAL				₹ 158,111.60
	Add for Sundries and contingencies	@	3.0%		₹ 4,743.35
	TOTAL				₹ 162,854.95
	Add 15% for contractor's profit and overheads	@	15%		₹ 24,428.24
	Cost for 10 nos.sluiice valve				₹ 187,283.19
	Cost per valve				₹ 18,728.32
	Say				₹ 18,728.30

19.32	Constructing masonry Chamber 30x30x50 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement :5 fine sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement :5 fine sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design :				
19.32.1	With Second class bricks				
Code	Description	Unit	Quantity	Rate	Amount
	Initial procedure to be adopted to analyse the item:				
	Quantities for one stop cock chamber as per prescribed in the item				
1	Earthwork: 1x0.68x0.68x0.65= 0.30 cum				
2	1:5:10 concrete in foundation: 1x0.68x0.68x0.075= 0.0347 cum				
3	Brickwork 2nd class in C.M 1:5: 2X0.53X0.115X0.50= 0.06095 cum				
	2x0.30x0.115x0.50=0.0345 cum Total = 0.095 cum				
4	12 mm cement plaster 1:3 with a floating coat of neat cement:				
	Bottom: 1x0.30x0.30= 0.09 sqm				
	Sides: 4x0.30x0.50=0.60 sqm Total= 0.69 sqm.				
5	Cement concrete: 1:2:4=1x0.53x0.53x0.075=0.02106 cum				
	Less surface area box: 1x0.112x0.112x0.075= (-) 0.00094 cum = 0.02021 cum				
	Materials:				
	Cement:				
	For 1:5:10= 0.045 q				
	For Brickwork 1:5 =0.074 q				
	For plaster 1:3= 0.066 q				
	For 1:2:4 concrete = 0.064 q Total= 0.249q say, 0.25 q				
03001	Cement:	t	0.025	₹ 6,100.00	₹ 152.50
04004	40 mm stone agg.	cum	0.032	₹ 3,532.00	₹ 113.02
04006	20 mm stone agg.	cum	0.0189	₹ 3,969.00	₹ 75.01
02003	Fine sand	cum	0.062	₹ 370.00	₹ 22.94
	For 1:5:10= 0.016 cum				
	For Brickwork 1:5 =0.026 cum				
	For plaster 1:3= 0.011 cum				
	For 1:2:4 concrete = 0.009 cum Total= 0.062 cum				
06002	2nd class Bricks	1000 Nos	36	₹ 6,690.00	₹ 240.84
19002	Surface box with hinged cover	No	1	₹ 130.00	₹ 130.00
	Carriage:				
0421	Cement	t	0.025	₹ 110.94	₹ 2.77
0406	Bricks	1000 nos	36	₹ 332.82	₹ 11.98
0404	40 mm stone agg.	cum	0.032	₹ 172.74	₹ 5.53
0405	20 mm stone agg.	cum	0.0189	₹ 159.75	₹ 3.02
0425	Fine sand	cum	0.062	₹ 142.63	₹ 8.84
	Labour:				
	For Excavation:				
0203	Belder	Day	0.15	₹ 300.00	₹ 45.00
0212	Helper	Day	0.15	₹ 300.00	₹ 45.00
	For remaining work:				
0219	Mason 1st class	Day	0.35	₹ 425.00	₹ 148.75
0203	Belder	Day	0.40	₹ 300.00	₹ 120.00
0212	Helper	Day	0.35	₹ 300.00	₹ 105.00
0205	Waterman	Day	0.20	₹ 300.00	₹ 60.00
TOTAL					₹ 1,290.21
	Add for carriage of surface box and re-carriage of materials from dumping spot to the site of the work etc.	@	3.0 %		₹ 38.71
	TOTAL				₹ 1,328.92
	Add for Form work i.e pre-cast mould for top slab	@	2.0 %		₹ 26.58
	TOTAL				₹ 1,355.50
	Add for Sundries and contingencies	@	3.0%		₹ 40.66
	TOTAL				₹ 1,396.16
	Add for water charges & electricity	@	1.0 %		₹ 13.96
	TOTAL				₹ 1,410.12
	Add 15% for contractor's profit and overheads	@	15%		₹ 211.52
	Cost for one chamber				₹ 1,621.64
					₹ 1,621.60

19.33	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :				
19.33.1	With Second class bricks				
Code	Description	Unit	Quantity	Rate	Amount
	Initial procedure to be adopted to analyse the item:				
	Quantities for one stop cock chamber as per prescribed in the item				
1	Earthwork: 1x 1.21 x 1.21 x 1.00= 1.4641 cum				
2	1:5:10 concrete in foundation: 1x 1.21 x 1.21 x 0.10= 0.1464 cum				
3	Brickwork 2nd class in C.M 1:4: 2X1.06X0.23 X0.75 = 0.3657 cum				
	2x0.60x 0.23 x0.750=0.207 cum Total = 0.5727 cum				
4	12 mm cement plaster 1:3 with a floating coat of neat cement:				
	Bottom: 1x0.60x0.60= 0.36 sqm				
	Sides: 4x0.60x0.750=1.80 sqm Total= 2.16 sqm.				
5	R.C.C : 1:2:4=1x 1.06 x 1.06 x 0.15=0.1685 cum				
	Less suface area box:3.14X0.156X0.156/4X0.18= (-) 0.0034 cum = 0.1651 cum				
6	Steel reinforcement: 80.00 kg/cum=0.1651 x 80=13.20 kg or = 0.132 q.				
	Materials:				
	Cement:				
	For 1:5:10= 0.1903 q				
	For Bricwork 1:4 =0.5441 q				
	For plaster 1:3= 0.206 q				
	For 1:2:4 concrete = 0.5283 q Total= 1.47q				
03001	Cement:	t	0.147	₹ 6,100.00	₹ 896.70
04004	40 mm stone agg. (1:5:10)	cum	0.135	₹ 3,532.00	₹ 476.82
04006	20 mm stone agg. (1:2:4)	cum	0.1552	₹ 3,969.00	₹ 615.99
02003	Fine sand	cum	0.3315	₹ 370.00	₹ 122.66
	For 1:5:10= 0.0675 cum				
	For Bricwork 1:4 =0.1532 cum				
	For plaster 1:3= 0.0333 cum				
	For RCC 1:2:4 = 0.0775 cum Total= 0.3315 cum				
06002	2nd class Bricks	1000 Nos	229	₹ 6,690.00	₹ 1,532.01
19003	Surface box with hinged cover	No	1	₹ 210.00	₹ 210.00
05062	Steel for reinforcement				
	13.20 kg + wastage =0.80 kg= Total= 14.00 kg	q	0.140	₹ 4,102.00	₹ 574.28
	Carriage:				
0421	Cement	t	0.137	₹ 110.94	₹ 15.20
0406	Bricks	1000 nos	229	₹ 332.82	₹ 76.22
0404	40 mm stone agg.	cum	0.135	₹ 172.74	₹ 23.32
0405	20 mm stone agg.	cum	0.1552	₹ 159.75	₹ 24.79
0425	Fine sand	cum	0.336	₹ 142.63	₹ 47.92
0468	Steel for reinforcement	t	0.014	₹ 110.94	₹ 1.55
	Labour:				
	For Excavation:				
0203	Belder	Day	0.60	₹ 300.00	₹ 180.00
0212	Helper	Day	0.70	₹ 300.00	₹ 210.00
	For remaining work:				
0215	Fitter (gr. I)	Day	0.15	₹ 380.00	₹ 57.00
0219	Mason	Day	0.12	₹ 425.00	₹ 51.00
0203	Belder	Day	1.00	₹ 300.00	₹ 300.00
0212	Helper	Day	0.12	₹ 300.00	₹ 36.00
0212	Coolie	Day	0.50	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.25	₹ 300.00	₹ 75.00
TOTAL					₹ 5,676.46
	Add for carriage of surface box and re-carriage of materials from dumping spot to the site of the work etc.	@	6.0 %		₹ 340.59
	TOTAL				₹ 6,017.05
	Add for Form work i.e pre-cast mould for top slab	@	3.0 %		₹ 180.51
	TOTAL				₹ 6,197.56
	Add for Binding wire, mould oil, bolts & nuts etc.	@	0.50 %		₹ 30.99

	TOTAL				₹ 6,228.54
	Add for Sundries and contingencies	@	3.0%		₹ 186.86
	TOTAL				₹ 6,415.40
	Add for water charges & electricity	@	1.5 %		₹ 96.23
	TOTAL				₹ 6,511.63
	Add 15% for contractor's profit and overheads	@	15%		₹ 976.74
	Cost for one chamber				₹ 7,488.38
					₹ 7,488.40
19.34:	Constructing masonry Chamber 90x90x100 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :				
19.34.1:	With Second class bricks				
Code	Description	Unit	Quantity	Rate	Amount
	Initial procedure to be adopted to analyse the item:				
	Quantities for one stop cock chamber as per prescribed in the item				
1	Earthwork: 1x 1.51 x 1.51 x 1.25=2.85 cum				
2	1:5:10 concrete in foundation: 1x 1.51 x 1.51 x 0.10= 0.228 cum				
3	Brickwork 2nd class in C.M 1:4: 2X 1.36X0.23 X 1.0 = 0.6256 cum				
	2x0.90x 0.23 x 1.0=0.414 cum Total = 1.039 cum				
4	12 mm cement plaster 1:3 with a floating coat of neat cement:				
	Bottom: 1x0.90x0.90= 0.81 sqm				
	Sides: 4x0.90x 1.0 =3.60 sqm Total= 4.41 sqm.				
5	R.C.C : 1:2:4=1x 1.36 x 1.36 x 0.15=0.2774 cum				
	Less surface area box:3.14X0.156X0.156/4X0.18= (-) 0.0034 cum = 0.274 cum				
6	Steel reinforcement: 80.00 kg/cum=0.274 x 80=21.92 kg or = 0.2192 q.				
	Materials:				
	Cement:				
	For 1:5:10= 0.2964 q				
	For Bricwork 1:5 =0.987 q				
	For plaster 1:3= 0.4837 q				
	For RCC 1:2:4 = 0.877 q say, Total= 2.644 q				
03001	Cement:	t	0.2644	₹ 6,100.00	₹ 1,612.84
04004	40 mm stone agg. (1:5:10)	cum	0.210	₹ 3,532.00	₹ 741.72
04006	20 mm stone agg. (1:2:4)	cum	0.258	₹ 3,969.00	₹ 1,024.00
02003	Fine sand	cum	.5792	₹ 370.00	₹ 214.30
	For 1:5:10= 0.1083 cum				
	For Bricwork 1:5 =0.2779 cum				
	For plaster 1:3= 0.064 cum				
	For 1:2:4 concrete = 0.129 cum Total= 0.5792 cum				
06002	2nd class Bricks	1000 Nos	415	₹ 6,690.00	₹ 2,776.35
19003	C.I Surface box with chained lid	No	1	₹ 210.00	₹ 210.00
05062	Steel for reinforcement				
	21.92 kg + wastage =1.08 kg= Total= 23.00 kg	q	0.23	₹ 4,102.00	₹ 943.46
	Carriage:				
0421	Cement	t	0.25	₹ 110.94	₹ 27.74
0406	Bricks	1000 nos	415	₹ 332.82	₹ 138.12
0404	40 mm stone agg.	cum	0.210	₹ 172.74	₹ 36.28
0405	20 mm stone agg.	cum	0.258	₹ 159.75	₹ 41.22
0425	Fine sand	cum	.5792	₹ 142.63	₹ 82.61
0468	Steel for reinforcement	t	0.023	₹ 110.94	₹ 2.55
	Labour:				
	For Excavation:				
0203	Belder	Day	1.50	₹ 300.00	₹ 450.00
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
	For remaining work:				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0215	Fitter (gr. I)	Day	0.13	₹ 380.00	₹ 47.50
0219	Mason	Day	0.60	₹ 425.00	₹ 255.00
0203	Belder	Day	1.250	₹ 300.00	₹ 375.00
0212	Helper	Day	0.125	₹ 300.00	₹ 37.50
0212	Coolie	Day	0.60	₹ 300.00	₹ 180.00

0205	Waterman	Day	0.30	₹ 300.00	₹ 90.00
TOTAL					₹ 9,821.19
	Add for carriage of surface box and re-carriage of materials from dumping spot to the site of the work etc.	@	5.0 %		₹ 491.06
	TOTAL				₹ 10,312.24
	Add for Form work i.e pre-cast mould for top slab	@	1.0 %		₹ 103.12
	TOTAL				₹ 10,415.37
	Add for Binding wire, mould oil, bolts & nuts etc.	@	1.0 %		₹ 104.15
	TOTAL				₹ 10,519.52
	Add for Sundries and contingencies	@	3.0%		₹ 315.59
	TOTAL				₹ 10,835.11
	Add for water charges & electricity	@	1.5 %		₹ 162.53
	TOTAL				₹ 10,997.63
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,649.64
	Cost for one chamber				₹ 12,647.28
					₹ 12,647.30
19.35:	Constructing masonry Chamber 120x120x100 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :				
19.35.1:	With Second class bricks				
Code	Description	Unit	Quantity	Rate	Amount
	Initial procedure to be adopted to analyse the item:				
	Quantities for one stop cock chamber as per prescribed in the item				
1	Earthwork: 1x 1.81 x 1.81 x 1.25= 4.095 cum				
2	1:5:10 concrete in foundation: 1x 1.81 x 1.81 x 0.10= 0.3276 cum				
3	Brickwork 2nd class in C.M 1:4: 2X 1.66X0.23 X 1.00 = 0.7635 cum 2x 1.20x 0.23 x 1.0=0.552 cum Total = 1.3156 cum				
4	12 mm cement plaster 1:3 with a floating coat of neat cement: Bottom: 1x 1.20x 1.20 = 1.44 sqm Sides: 4x 1.20 x 1.0 = 4.80 sqm Total= 6.24 sqm.				
5	R.C.C : 1:2:4=1x 1.66 x 1.66 x 0.15=0.4133 cum Less surface area box: 3.14X0.156X0.156/4X0.18= (-) 0.0034 cum = 0.4099 cum				
6	Steel reinforcement: 80.00 kg/cum=0.4099 x 80=32.792 kg or = 0.32792 q.				
	Materials:				
	Cement:				
	For 1:5:10= 0.4259 q				
	For Bricwork 1:4 =1.24981 q				
	For plaster 1:3= 0.5952 q				
	For RCC 1:2:4 = 1.3116 q say, Total=3.5825 q				
03001	Cement:	t	.35825	₹ 6,100.00	₹ 2,185.33
04004	40 mm stone agg. (1:5:10)	cum	0.301	₹ 3,532.00	₹ 1,063.13
04006	20 mm stone agg. (1:2:4)	cum	0.385	₹ 3,969.00	₹ 1,528.07
02003	Fine sand	cum	.72287	₹ 370.00	₹ 267.46
	For 1:5:10= 0.1556 cum				
	For Bricwork 1:4 =0.3519 cum				
	For plaster 1:3= 0.0961 cum				
	For 1:2:4 concrete = 0.11927 cum Total= 0.72287 cum				
06002	2nd class Bricks	1000 Nos	520	₹ 6,690.00	₹ 3,478.80
19003	C.I Surface box with chained lid	No	1	₹ 210.00	₹ 210.00
05062	Steel for reinforcement				
	32.792 kg + wastage =1.708 kg= Total= 34.50 kg	q	0.345	₹ 4,102.00	₹ 1,415.19
	Carriage:				
0421	Cement	t	.35825	₹ 110.94	₹ 39.74
0406	Bricks	1000 nos	520	₹ 332.82	₹ 173.07
0404	40 mm stone agg.	cum	0.301	₹ 172.74	₹ 51.99
0405	20 mm stone agg.	cum	0.385	₹ 159.75	₹ 61.50
0425	Fine sand	cum	.72287	₹ 142.63	₹ 103.10
0468	Steel for reinforcement	t	0.345	₹ 110.94	₹ 38.27

	Labour:				
	For Excavation:				
0203	Belder	Day	2.15	₹ 300.00	₹ 645.00
0212	Helper	Day	2.15	₹ 300.00	₹ 645.00
	For remaining work:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0215	Fitter (gr. I)	Day	0.15	₹ 380.00	₹ 57.00
0219	Mason	Day	0.75	₹ 425.00	₹ 318.75
0203	Belder	Day	1.00	₹ 300.00	₹ 300.00
0212	Helper	Day	0.20	₹ 300.00	₹ 60.00
0212	Coolie	Day	0.75	₹ 300.00	₹ 225.00
0205	Waterman	Day	0.35	₹ 300.00	₹ 105.00
TOTAL					₹ 13,077.66
	Add for carriage of surface box and re-carriage of materials from dumping spot to the site of the work etc.	@	6.0 %		₹ 784.66
	TOTAL				₹ 13,862.32
	Add for Form work i.e pre-cast mould for top slab	@	0.50 %		₹ 69.31
	TOTAL				₹ 13,931.63
	Add for Binding wire, mould oil, bolts & nuts etc.	@	0.60 %		₹ 83.59
	TOTAL				₹ 14,015.22
	Add for Sundries and contingencies	@	3.0%		₹ 420.46
	TOTAL				₹ 14,435.68
	Add for water charges & electricity	@	1.5 %		₹ 216.54
	TOTAL				₹ 14,652.21
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,197.83
	Cost for one chamber				₹ 16,850.05
					₹ 16,850.00
19.36:	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for fire hydrants, with C.I. surface box 350x350 mm. top and 165 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :				
19.36.1:	With Second class bricks				
Code	Description	Unit	Quantity	Rate	Amount
	Initial procedure to be adopted to analyse the item:				
	Quantities for one stop cock chamber as per prescribed in the item				
1	Earthwork: 1x 1.21 x 1.21 x 1.00= 1.4641 cum				
2	1:5:10 concrete in foundation: 1x 1.21 x 1.21 x 0.10= 0.1464 cum				
3	Brickwork 2nd class in C.M 1:4: 2X 1.06X0.23 X 0.75 = 0.3657 cum 2x 0.60 x 0.23 x 0.75 =0.207 cum Total = 0.5727 cum				
4	12 mm cement plaster 1:3 with a floating coat of neat cement: Bottom: 1x 0.60 x 0.60 = 0.36 sqm Sides: 4x 0.60 x 0.75 = 1.80 sqm Total= 2.16 sqm.				
5	R.C.C : 1:2:4 =1x 1.06 x 1.06 x 0.15=0.1685 cum				
	Less surface area box: 0.61 x 0.41 x 0.165 = (-) 0.04126 cum = 0.12724 cum				
6	Steel reinforcement: 80.00 kg/cum=0.12724 x 80=10.18 kg or = 0.1018 q.				
	Materials:				
	Cement:				
	For 1:5:10= 0.1903 q				
	For Brickwork 1:4 =0.5441 q				
	For plaster 1:3= 0.206 q				
	For RCC 1:2:4 = 0.4064 q say, Total=1.3468 q				
03001	Cement:	t	.13468	₹ 6,100.00	₹ 821.55
04004	40 mm stone agg. (1:5:10)	cum	0.135	₹ 3,532.00	₹ 476.82
04006	20 mm stone agg. (1:2:4)	cum	0.123	₹ 3,969.00	₹ 488.19
02003	Fine sand	cum	.31559	₹ 370.00	₹ 116.77
	For 1:5:10= 0.0695 cum				
	For Brickwork 1:4 =0.1532 cum				
	For plaster 1:3= 0.0332 cum				
	For 1:2:4 concrete = 0.05969 cum Total= 0.31559 cum				

06002	2nd class Bricks	1000 Nos	229	₹ 6,690.00	₹ 1,532.01
19003	C.I Surface box with chained lid	No	1	₹ 210.00	₹ 210.00
05062	Steel for reinforcement				
	10.18 kg + wastage =0.82 kg= Total= 11.00 kg=0.11 q	q	0.11	₹ 4,102.00	₹ 451.22
	Carriage:				
0421	Cement	t	.13468	₹ 110.94	₹ 14.94
0406	Bricks	1000 nos	229	₹ 332.82	₹ 76.22
0404	40 mm stone agg.	cum	0.135	₹ 172.74	₹ 23.32
0405	20 mm stone agg.	cum	0.123	₹ 159.75	₹ 19.65
0425	Fine sand	cum	.31559	₹ 142.63	₹ 45.01
0468	Steel for reinforcement	t	0.11	₹ 110.94	₹ 12.20
	Labour:				
	For Excavation:				
0203	Belder	Day	0.80	₹ 300.00	₹ 240.00
0212	Helper	Day	0.80	₹ 300.00	₹ 240.00
	For remaining work:				
0216	Foreman	Day	0.130	₹ 425.00	₹ 55.25
0215	Fitter (gr. I)	Day	0.125	₹ 380.00	₹ 47.50
0219	Mason	Day	0.500	₹ 425.00	₹ 212.50
0203	Belder	Day	1.000	₹ 300.00	₹ 300.00
0212	Helper	Day	0.500	₹ 300.00	₹ 150.00
0205	Waterman	Day	0.250	₹ 300.00	₹ 75.00
TOTAL					₹ 5,608.15
	Add for carriage of surface box and re-carriage of materials from dumping spot to the site of the work etc.	@	6.0 %		₹ 336.49
	TOTAL				₹ 5,944.63
	Add for Form work i.e pre-cast mould for top slab	@	1.20 %		₹ 71.34
	TOTAL				₹ 6,015.97
	Add for Binding wire, mould oil, bolts & nuts etc.	@	0.75 %		₹ 45.12
	TOTAL				₹ 6,061.09
	Add for Sundries and contingencies	@	3.0%		₹ 181.83
	TOTAL				₹ 6,242.92
	Add for water charges & electricity	@	1.5 %		₹ 93.64
	TOTAL				₹ 6,336.57
	Add 15% for contractor's profit and overheads	@	15%		₹ 950.48
	Cost for one chamber				₹ 7,287.05
					₹ 7,287.10
19.37	Constructing masonry Chamber 60x45x50 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangement and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :				
19.37.1:	With Second class bricks				
Code	Description	Unit	Quantity	Rate	Amount
	Initial procedure to be adopted to analyse the item:				
	Quantities for one stop cock chamber as per prescribed in the item				
1	Earthwork: 1x 1.21 x 1.06 x 0.85 = 1.09 cum				
2	1:5:10 concrete in foundation: 1x 1.21 x 1.06 x 0.10= 0.128 cum				
3	Brickwork 2nd class in C.M 1:4: 2X 1.06X0.23 X 0.50 = 0.2438 cum 2x 0.45 x 0.23 x 0.50 =0.1035 cum Total = 0.3473cum				
4	12 mm cement plaster 1:3 with a floating coat of neat cement:				
	Bottom: 1x 0.60 x 0.45 = 0.27 sqm				
	Sides: 2x 0.60 x 0.50 = 0.60 sqm & 2x 0.45 x 0.50 = 0.45 sqm Total= 1.32 sqm.				
5	R.C.C : 1:2:4 =1x 1.06 x 0.91 x 0.25=0.2411 cum				
	Less surface area box: 1 x 0.42 x 0.22 x 0.20 = (-) 0.0185 cum = 0.2226 cum				
6	Steel reinforcement: 80.00 kg/cum=0.2226 x 80=17.81 kg or = 0.1781 q.				
	Materials:				
	Cement:				

	For 1:5:10= 0.1664 q				
	For Bricwork 1:4 =0.3299 q				
	For plaster 1:3= 0.1259 q				
	For RCC 1:2:4 = 0.7123 q , = 1.3345				
03001	Cement:	t	.13345	₹ 6,100.00	₹ 814.05
04004	40 mm stone agg. (1:5:10)	cum	0.118	₹ 3,532.00	₹ 416.78
04006	20 mm stone agg. (1:2:4)	cum	0.209	₹ 3,969.00	₹ 829.52
02003	Fine sand	cum	0.30	₹ 370.00	₹ 111.00
	For 1:5:10= 0.060 cum				
	For Bricwork 1:4 =0.0929cum				
	For plaster 1:3= 0.020 cum				
	For 1:2:4 concrete = 0.105 cum =0.28 cum, say Total= 0.30 cum				
06002	2nd class Bricks	1000 Nos	132	₹ 6,690.00	₹ 883.08
19004	C.I Surface box with locking arrangement	No	1	₹ 260.00	₹ 260.00
05062	Steel for reinforcement				
	17.81 kg + wastage =0.69 kg= Total= 18.50 kg= 0.185 q	q	0.185	₹ 4,102.00	₹ 758.87
	Carriage:				
0421	Cement	t	.13345	₹ 110.94	₹ 14.80
0406	Bricks	1000 nos	132	₹ 332.82	₹ 43.93
0404	40 mm stone agg.	cum	0.118	₹ 172.74	₹ 20.38
0405	20 mm stone agg.	cum	0.209	₹ 159.75	₹ 33.39
0425	Fine sand	cum	0.30	₹ 142.63	₹ 42.79
0468	Steel for reinforcement	t	0.185	₹ 110.94	₹ 20.52
	Labour:				
	For Excavation:				
0203	Belder	Day	0.70	₹ 300.00	₹ 210.00
0212	Helper	Day	0.70	₹ 300.00	₹ 210.00
	For remaining work:				
0216	Foreman	Day	0.075	₹ 425.00	₹ 31.88
0215	Fitter (gr. I)	Day	0.100	₹ 380.00	₹ 38.00
0219	Mason	Day	0.400	₹ 425.00	₹ 170.00
0203	Belder	Day	0.750	₹ 300.00	₹ 225.00
0212	Helper	Day	0.400	₹ 300.00	₹ 120.00
0205	Waterman	Day	0.200	₹ 300.00	₹ 60.00
TOTAL					₹ 5,313.99
	Add for carriage of surface box and re-carriage of materials from dumping spot to the site of the work etc.	@	5.0 %		₹ 239.13
	TOTAL				₹ 5,553.12
	Add for Form work i.e pre-cast mould for top slab	@	1.0 %		₹ 55.53
	TOTAL				₹ 5,608.65
	Add for Binding wire, mould oil, bolts & nuts etc.	@	0.50 %		₹ 28.04
	TOTAL				₹ 5,636.69
	Add for Sundries and contingencies	@	3.0%		₹ 169.10
	TOTAL				₹ 5,805.79
	Add for water charges & electricity	@	1.5 %		₹ 87.09
	TOTAL				₹ 5,892.88
	Add 15% for contractor's profit and overheads	@	15%		₹ 883.93
	Cost for one chamber				₹ 6,776.81
					₹ 6,776.80
19.38:	Painting G.I. pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work :				
19.38.1:	15 mm diameter pipe. —				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Perimeter = 15 mm dia = 0.0673 metre				
	Area for 10.00 mtr. =10 x 0.0673 rn = 0.673 sqm.				
	Materials:				
12037	Ready mix primer	Litre	0.065	₹ 85.00	₹ 5.53
12040	Synthetic enamel white paint	Litre	0.0685	₹ 190.00	₹ 13.02

	Labour:				
0216	Foreman	Day	0.035	₹ 425.00	₹ 14.88
0227	Painter	Day	0.05	₹ 340.00	₹ 17.00
0212	Helper	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 65.42
	Add for Carriage of materials,Brushes, sand paper etc.	@	10 %		₹ 6.54
	TOTAL				₹ 71.96
	Add for Sundries and contingencies	@	3.0%		₹ 2.16
	TOTAL				₹ 74.12
	Add 15% for contractor's profit and overheads	@	15 %		₹ 11.12
	Cost for 10 mtr. length				₹ 85.23
	Cost per mtr.				₹ 8.52
	Say				₹ 8.50
19.38:	Painting G.I. pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work :				
19.38.2	20 mm diameter pipe. —				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Perimeter = 20 mm dia = 0.0845 metre				
	Area for 10.00 mtr. =10 x 0.0845 rn = 0.845 sqm.				
	Materials:				
12037	Ready mix primer	Litre	0.0760	₹ 85.00	₹ 6.46
12040	Synthetic enamel white paint	Litre	0.0845	₹ 190.00	₹ 16.06
	Labour:				
0216	Foreman	Day	0.040	₹ 425.00	₹ 17.00
0227	Painter	Day	0.055	₹ 340.00	₹ 18.70
0212	Helper	Day	0.055	₹ 300.00	₹ 16.50
	TOTAL				₹ 74.72
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 5.98
	TOTAL				₹ 80.69
	Add for Sundries and contingencies	@	3.0%		₹ 2.42
	TOTAL				₹ 83.11
	Add 15% for contractor's profit and overheads		15%		₹ 12.47
	Cost for 10 mtr. length				₹ 95.58
	Cost per mtr.				₹ 9.56
	Say				₹ 9.60
19.38:	Painting G.I. pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work :				
19.38.3	25 mm diameter pipe. —				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Perimeter = 25 mm dia = 0.1061 metre				
	Area for 10.00 mtr. =10 x 0.1061 rn = 1.061 sqm.				
	Materials:				
12037	Ready mix primer	Litre	0.0955	₹ 85.00	₹ 8.12
12040	Synthetic enamel white paint	Litre	0.1060	₹ 190.00	₹ 20.14
	Labour:				
0216	Foreman	Day	0.045	₹ 425.00	₹ 19.13
0227	Painter	Day	0.080	₹ 340.00	₹ 27.20
0212	Helper	Day	0.080	₹ 300.00	₹ 24.00
	TOTAL				₹ 98.58
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 7.89
	TOTAL				₹ 106.47

	Add for Sundries and contingencies	@	3.0%		₹ 3.19
	TOTAL				₹ 109.66
	Add 15% for contractor's profit and overheads		15%		₹ 16.45
	Cost for 10 mtr. length				₹ 126.11
	Cost per mtr.				₹ 12.61
	Say				₹ 12.60
19.38:	Painting G.I. pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work :				
19.38.4	32 mm diameter pipe. —				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Perimeter = 32 mm dia = 0.1334 metre				
	Area for 10.00 mtr. =10 x 0.1334 rn = 1.334 sqm.				
	Materials:				
12037	Ready mix primer	Litre	0.0955	₹ 85.00	₹ 8.12
12040	Synthetic enamel white paint	Litre	0.1340	₹ 190.00	₹ 25.46
	Labour:				
0216	Foreman	Day	0.060	₹ 425.00	₹ 25.50
0227	Painter	Day	0.095	₹ 340.00	₹ 32.30
0212	Helper	Day	0.095	₹ 300.00	₹ 28.50
	TOTAL				₹ 119.88
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 9.59
	TOTAL				₹ 129.47
	Add for Sundries and contingencies	@	3.0%		₹ 3.88
	TOTAL				₹ 133.35
	Add 15% for contractor's profit and overheads		15%		₹ 20.00
	Cost for 10 mtr. length				₹ 153.35
	Cost per mtr.				₹ 15.34
	Say				₹ 15.30
19.38:	Painting G.I. pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work :				
19.38.5	40 mm diameter pipe. —				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Perimeter = 40 mm dia = 0.1520 metre				
	Area for 10.00 mtr. =10 x 0.1520 rn = 1.520 sqm.				
	Materials:				
12037	Ready mix primer	Litre	0.1370	₹ 85.00	₹ 11.65
12040	Synthetic enamel white paint	Litre	0.1520	₹ 190.00	₹ 28.88
	Labour:				
0216	Foreman	Day	0.070	₹ 425.00	₹ 29.75
0227	Painter	Day	0.120	₹ 340.00	₹ 40.80
0212	Helper	Day	0.120	₹ 300.00	₹ 36.00
	TOTAL				₹ 147.08
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 11.77
	TOTAL				₹ 158.84
	Add for Sundries and contingencies	@	3.0%		₹ 4.77
	TOTAL				₹ 163.61
	Add 15% for contractor's profit and overheads		15%		₹ 24.54
	Cost for 10 mtr. length				₹ 188.15
	Cost per mtr.				₹ 18.81
	Say				₹ 18.80

19.38:	Painting G.I. pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work :				
19.38.6	50 mm diameter pipe. ---				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Perimeter = 50 mm dia = 0.1894 metre				
	Area for 10.00 mtr. =10 x 0.1894 rn = 1.894sqm.				
	Materials:				
12037	Ready mix primer	Litre	0.1700	₹ 85.00	₹ 14.45
12040	Synthetic enamel white paint	Litre	0.1894	₹ 190.00	₹ 35.99
	Labour:				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0227	Painter	Day	0.125	₹ 340.00	₹ 42.50
0212	Helper	Day	0.125	₹ 300.00	₹ 37.50
	TOTAL				₹ 164.44
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 13.15
	TOTAL				₹ 177.59
	Add for Sundries and contingencies	@	3.0%		₹ 5.33
	TOTAL				₹ 182.92
	Add 15% for contractor's profit and overheads		15%		₹ 27.44
	Cost for 10 mtr. length				₹ 210.36
	Cost per mtr.				₹ 21.04
	Say				₹ 21.00
19.39:	Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality :				
19.39.1:	15 mm diameter pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12040	Synthetic enamel white paint	Litre	0.040	₹ 190.00	₹ 7.60
	Labour:				
0216	Foreman	Day	0.030	₹ 425.00	₹ 12.75
0227	Painter	Day	0.030	₹ 340.00	₹ 10.20
0212	Helper	Day	0.030	₹ 300.00	₹ 9.00
	TOTAL				₹ 39.55
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 3.16
	TOTAL				₹ 42.71
	Add for Sundries and contingencies	@	3.0%		₹ 1.28
	TOTAL				₹ 44.00
	Add 15% for contractor's profit and overheads		15%		₹ 6.60
	Cost for 10 mtr. length				₹ 50.59
	Cost per mtr.				₹ 5.06
	Say				₹ 5.10
19.39:	Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality :				
19.39.2	20 mm diameter pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12040	Synthetic enamel white paint	Litre	0.050	₹ 190.00	₹ 9.50
	Labour:				

0216	Foreman	Day	0.030	₹ 425.00	₹ 12.75
0227	Painter	Day	0.035	₹ 340.00	₹ 11.90
0212	Helper	Day	0.035	₹ 300.00	₹ 10.50
	TOTAL				₹ 44.65
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 3.57
	TOTAL				₹ 48.22
	Add for Sundries and contingencies	@	3.0%		₹ 1.45
	TOTAL				₹ 49.67
	Add 15% for contractor's profit and overheads		15%		₹ 7.45
	Cost for 10 mtr. length				₹ 57.12
	Cost per mtr.				₹ 5.71
	Say				₹ 5.70
19.39:	Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality :				
19.39.3	25 mm diameter pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12040	Synthetic enamel white paint	Litre	0.064	₹ 190.00	₹ 12.16
	Labour:				
0216	Foreman	Day	0.035	₹ 425.00	₹ 14.88
0227	Painter	Day	0.045	₹ 340.00	₹ 15.30
0212	Helper	Day	0.045	₹ 300.00	₹ 13.50
	TOTAL				₹ 55.84
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 4.47
	TOTAL				₹ 60.30
	Add for Sundries and contingencies	@	3.0%		₹ 1.81
	TOTAL				₹ 62.11
	Add 15% for contractor's profit and overheads		15%		₹ 9.32
	Cost for 10 mtr. length				₹ 71.43
	Cost per mtr.				₹ 7.14
	Say				₹ 7.10
19.39:	Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality :				
19.39.4	32 mm diameter pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12040	Synthetic enamel white paint	Litre	0.080	₹ 190.00	₹ 15.20
	Labour:				
0216	Foreman	Day	0.040	₹ 425.00	₹ 17.00
0227	Painter	Day	0.055	₹ 340.00	₹ 18.70
0212	Helper	Day	0.055	₹ 300.00	₹ 16.50
	TOTAL				₹ 67.40
	Add for Carriage of materials,Brushes, sand paper etc.	@	6.0 %		₹ 4.04
	TOTAL				₹ 71.44
	Add for Sundries and contingencies	@	3.0%		₹ 2.14
	TOTAL				₹ 73.59
	Add 15% for contractor's profit and overheads		15%		₹ 11.04
	Cost for 10 mtr. length				₹ 84.63
	Cost per mtr.				₹ 8.46
	Say				₹ 8.50

19.39:	Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality :				
19.39.5	40 mm diameter pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12040	Synthetic enamel white paint	Litre	0.090	₹ 190.00	₹ 17.10
	Labour:				
0216	Foreman	Day	0.045	₹ 425.00	₹ 19.13
0227	Painter	Day	0.066	₹ 340.00	₹ 22.44
0212	Helper	Day	0.066	₹ 300.00	₹ 19.80
	TOTAL				₹ 78.47
	Add for Carriage of materials,Brushes, sand paper etc.	@	5.0 %		₹ 3.92
	TOTAL				₹ 82.39
	Add for Sundries and contingencies	@	3.0%		₹ 2.47
	TOTAL				₹ 84.86
	Add 15% for contractor's profit and overheads		15%		₹ 12.73
	Cost for 10 mtr. length				₹ 97.59
	Cost per mtr.				₹ 9.76
	Say				₹ 9.80
19.39:	Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality :				
19.39.6	50 mm diameter pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12040	Synthetic enamel white paint	Litre	0.110	₹ 190.00	₹ 20.90
	Labour:				
0216	Foreman	Day	0.052	₹ 425.00	₹ 22.10
0227	Painter	Day	0.078	₹ 340.00	₹ 26.52
0212	Helper	Day	0.078	₹ 300.00	₹ 23.40
	TOTAL				₹ 92.92
	Add for Carriage of materials,Brushes, sand paper etc.	@	4.50 %		₹ 4.18
	TOTAL				₹ 97.10
	Add for Sundries and contingencies	@	3.0%		₹ 2.91
	TOTAL				₹ 100.01
	Add 15% for contractor's profit and overheads		15%		₹ 15.00
	Cost for 10 mtr. length				₹ 115.02
	Cost per mtr.				₹ 11.50
	Say				₹ 11.50
19.40:	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
19.40.1:	15 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12008	Anticorrosive Bitumastic paint	Litre	0.0673	₹ 125.00	₹ 8.41
	Labour:				
0216	Foreman	Day	0.030	₹ 425.00	₹ 12.75
0227	Painter	Day	0.040	₹ 340.00	₹ 13.60
0212	Helper	Day	0.040	₹ 300.00	₹ 12.00
	TOTAL				₹ 46.76
	Add for Carriage of materials,Brushes, sand paper etc.	@	9.0 %		₹ 4.21
	TOTAL				₹ 50.97

	Add for Sundries and contingencies	@	3.0%		₹ 1.53
	TOTAL				₹ 52.50
	Add 15% for contractor's profit and overheads		15%		₹ 7.88
	Cost for 10 mtr. length				₹ 60.38
	Cost per mtr.				₹ 6.04
	Say				₹ 6.00
19.40:	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
19.40.2	20 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12008	Anticorrosive Bitumastic paint	Litre	0.0850	₹ 125.00	₹ 10.63
	Labour:				
0216	Foreman	Day	0.030	₹ 425.00	₹ 12.75
0227	Painter	Day	0.050	₹ 340.00	₹ 17.00
0212	Helper	Day	0.050	₹ 300.00	₹ 15.00
	TOTAL				₹ 55.38
	Add for Carriage of materials,Brushes, sand paper etc.	@	8.0 %		₹ 4.43
	TOTAL				₹ 59.81
	Add for Sundries and contingencies	@	3.0%		₹ 1.79
	TOTAL				₹ 61.60
	Add 15% for contractor's profit and overheads		15%		₹ 9.24
	Cost for 10 mtr. length				₹ 70.84
	Cost per mtr.				₹ 7.08
	Say				₹ 7.10
19.40:	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
19.40.3	25 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12008	Anticorrosive Bitumastic paint	Litre	0.1060	₹ 125.00	₹ 13.25
	Labour:				
0216	Foreman	Day	0.035	₹ 425.00	₹ 14.88
0227	Painter	Day	0.0625	₹ 340.00	₹ 21.25
0212	Helper	Day	0.0625	₹ 300.00	₹ 18.75
	TOTAL				₹ 68.13
	Add for Carriage of materials,Brushes, sand paper etc.	@	7.0 %		₹ 4.77
	TOTAL				₹ 72.89
	Add for Sundries and contingencies	@	3.0%		₹ 2.19
	TOTAL				₹ 75.08
	Add 15% for contractor's profit and overheads		15%		₹ 11.26
	Cost for 10 mtr. length				₹ 86.34
	Cost per mtr.				₹ 8.63
	Say				₹ 8.60
19.40:	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
19.40.4	32 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12008	Anticorrosive Bitumastic paint	Litre	0.1340	₹ 125.00	₹ 16.75

	Labour:				
0216	Foreman	Day	0.042	₹ 425.00	₹ 17.85
0227	Painter	Day	0.080	₹ 340.00	₹ 27.20
0212	Helper	Day	0.080	₹ 300.00	₹ 24.00
	TOTAL				₹ 85.80
	Add for Carriage of materials,Brushes, sand paper etc.	@	6.50 %		₹ 5.58
	TOTAL				₹ 91.38
	Add for Sundries and contingencies	@	3.0%		₹ 2.74
	TOTAL				₹ 94.12
	Add 15% for contractor's profit and overheads		15%		₹ 14.12
	Cost for 10 mtr. length				₹ 108.24
	Cost per mtr.				₹ 10.82
	Say				₹ 10.80
19.40:	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
19.40.5	40 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12008	Anticorrosive Bitumastic paint	Litre	0.1520	₹ 125.00	₹ 19.00
	Labour:				
0216	Foreman	Day	0.045	₹ 425.00	₹ 19.13
0227	Painter	Day	0.090	₹ 340.00	₹ 30.60
0212	Helper	Day	0.090	₹ 300.00	₹ 27.00
	TOTAL				₹ 95.73
	Add for Carriage of materials,Brushes, sand paper etc.	@	10.00 %		₹ 9.57
	TOTAL				₹ 105.30
	Add for Sundries and contingencies	@	3.0%		₹ 3.16
	TOTAL				₹ 108.46
	Add 15% for contractor's profit and overheads		15%		₹ 16.27
	Cost for 10 mtr. length				₹ 124.72
	Cost per mtr.				₹ 12.47
	Say				₹ 12.50
19.40:	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
19.40.6	50 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12008	Anticorrosive Bitumastic paint	Litre	0.1000	₹ 125.00	₹ 12.50
	Labour:				
0216	Foreman	Day	0.060	₹ 425.00	₹ 25.50
0227	Painter	Day	0.110	₹ 340.00	₹ 37.40
0212	Helper	Day	0.110	₹ 300.00	₹ 33.00
	TOTAL				₹ 108.40
	Add for Carriage of materials,Brushes, sand paper etc.	@	9.0 %		₹ 9.76
	TOTAL				₹ 118.16
	Add for Sundries and contingencies	@	3.0%		₹ 3.54
	TOTAL				₹ 121.70
	Add 15% for contractor's profit and overheads		15%		₹ 18.26
	Cost for 10 mtr. length				₹ 139.96
	Cost per mtr.				₹ 14.00
	Say				₹ 14.00

19.40:	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
19.40.7	65 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12008	Anticorrosive Bitumastic paint	Litre	0.2380	₹ 125.00	₹ 29.75
	Labour:				
0216	Foreman	Day	0.085	₹ 425.00	₹ 36.13
0227	Painter	Day	0.145	₹ 340.00	₹ 49.30
0212	Helper	Day	0.145	₹ 300.00	₹ 43.50
	TOTAL				₹ 158.68
	Add for Carriage of materials,Brushes, sand paper etc.	@	7.0 %		₹ 11.11
	TOTAL				₹ 169.78
	Add for Sundries and contingencies	@	3.0%		₹ 5.09
	TOTAL				₹ 174.88
	Add 15% for contractor's profit and overheads		15%		₹ 26.23
	Cost for 10 mtr. length				₹ 201.11
	Cost per mtr.				₹ 20.11
	Say				₹ 20.10
19.40:	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
19.40.7	80 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for painting G.I pipes and fittings for 10.00 mtr. length.				
	Materials:				
12008	Anticorrosive Bitumastic paint	Litre	0.2800	₹ 125.00	₹ 35.00
	Labour:				
0216	Foreman	Day	0.120	₹ 425.00	₹ 51.00
0227	Painter	Day	0.170	₹ 340.00	₹ 57.80
0212	Helper	Day	0.170	₹ 300.00	₹ 51.00
	TOTAL				₹ 194.80
	Add for Carriage of materials,Brushes, sand paper etc.	@	7.50 %		₹ 14.61
	TOTAL				₹ 209.41
	Add for Sundries and contingencies	@	3.0%		₹ 6.28
	TOTAL				₹ 215.69
	Add 15% for contractor's profit and overheads		15%		₹ 32.35
	Cost for 10 mtr. length				₹ 248.05
	Cost per mtr.				₹ 24.80
	Say				₹ 24.80
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.				
19.41.1:	15 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.				
	Calculating quantity of Sand to be filled:				
	Position and depth of sand filling for 15 mm pipe:				
	Under the pipe: 75 mm				
	Above the pipe: 150 mm				
	Max. external dia of pipe: 21.8 mm				
	Total sand depth: 246.80 mm				
	Width: 300 mm				
	Qty. of Sand: 1 x 10 x 0.30x 0.2468 = 0.74 cum				

	Less pipe portion: $1 \times 3.14 \times 0.0218 \times 0.0218 / 4 \times 10 = (-) 0.0037 \text{ cum} = 0.7363 \text{ cum}$				
	Hence Net Qty. of sand to be filled: 0.7363				
	Say: 0.74 cum				
	Materials:				
02002	Sand for filling	cum	0.740	₹ 300.00	₹ 222.00
	Carriage:				
0425	Sand	cum	0.740	₹ 142.63	₹ 105.55
	Labour:				
	for filling				
0216	Foreman	Day	0.050	₹ 425.00	₹ 21.25
0203	Beldar	Day	0.060	₹ 300.00	₹ 18.00
0212	Helper	Day	0.060	₹ 300.00	₹ 18.00
	TOTAL				₹ 384.80
	Add for Sundries and contingencies	@	3.0%		₹ 11.54
	TOTAL				₹ 396.34
	Add 15% for contractor's profit and overheads		15%		₹ 59.45
	Cost of providing & filling for 10 mtr. length				₹ 455.79
	Cost per mtr.				₹ 45.58
	Say				₹ 45.60
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.				
19.41.2	20 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.					
	Calculating quantity of Sand to be filled:				
	Position and depth of sand filling for 20 mm pipe:				
	Under the pipe: 75 mm				
	Above the pipe: 150 mm				
	Max. external dia of pipe: 27.30 mm				
	Total sand depth: 252.30 mm				
	Width: 300 mm				
	Qty. of Sand: $1 \times 10 \times 0.30 \times 0.2523 = 0.7569 \text{ cum}$				
	Less pipe portion: $1 \times 3.14 \times 0.0273 \times 0.0273 / 4 \times 10 = (-) 0.0058 \text{ cum} = 0.7511 \text{ cum}$				
	Hence Net Qty. of sand to be filled: 0.7511 cum				
	Say: 0.75 cum				
	Materials:				
02002	Sand for filling	cum	0.750	₹ 300.00	₹ 225.00
	Carriage:				
0425	Sand	cum	0.750	₹ 142.63	₹ 106.97
	Labour:				
	for filling				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0203	Beldar	Day	0.060	₹ 300.00	₹ 18.00
0212	Helper	Day	0.065	₹ 300.00	₹ 19.50
	TOTAL				₹ 403.47
	Add for Sundries and contingencies	@	3.0%		₹ 12.10
	TOTAL				₹ 415.58
	Add 15% for contractor's profit and overheads		15%		₹ 62.34
	Cost of providing & filling for 10 mtr. length				₹ 477.91
	Cost per mtr.				₹ 47.79
	Say				₹ 47.80
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.				
19.41.3	25 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.					
	Calculating quantity of Sand to be filled:				

	Position and depth of sand filling for 25 mm pipe:				
	Under the pipe: 75 mm				
	Above the pipe: 150 mm				
	Max. external dia of pipe: 34.20 mm				
	Total sand depth: 259.20 mm				
	Width: 300 mm				
	Qty. of Sand: $1 \times 10 \times 0.30 \times 0.2592 = 0.7776$ cum				
	Less pipe portion: $1 \times 3.14 \times 0.0342 \times 0.0342 / 4 \times 10 = (-) 0.0092$ cum = 0.7684 cum				
	Hence Net Qty. of sand to be filled: 0.7684cum				
	Say: 0.77 cum				
	Materials:				
02002	Sand for filling	cum	0.770	₹ 300.00	₹ 231.00
	Carriage:				
0425	Sand	cum	0.770	₹ 142.63	₹ 109.83
	Labour:				
	for filling				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0203	Beldar	Day	0.070	₹ 300.00	₹ 21.00
0212	Helper	Day	0.070	₹ 300.00	₹ 21.00
	TOTAL				₹ 416.83
	Add for Sundries and contingencies	@	3.0%		₹ 12.50
	TOTAL				₹ 429.33
	Add 15% for contractor's profit and overheads		15%		₹ 64.40
	Cost of providing & filling for 10 mtr. length				₹ 493.73
	Cost per mtr.				₹ 49.37
	Say				₹ 49.40
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.				
19.41.4	32 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.					
	Calculating quantity of Sand to be filled:				
	Position and depth of sand filling for 32 mm pipe:				
	Under the pipe: 75 mm				
	Above the pipe: 150 mm				
	Max. external dia of pipe: 42.90 mm				
	Total sand depth: 267.90 mm				
	Width: 300 mm				
	Qty. of Sand: $1 \times 10 \times 0.30 \times 0.2679 = 0.8037$ cum				
	Less pipe portion: $1 \times 3.14 \times 0.0429 \times 0.0429 / 4 \times 10 = (-) 0.01442$ cum = 0.7893 cum				
	Hence Net Qty. of sand to be filled: 0.7893 cum				
	Say: 0.79 cum				
	Materials:				
02002	Sand for filling	cum	0.790	₹ 300.00	₹ 237.00
	Carriage:				
0425	Sand	cum	0.790	₹ 142.63	₹ 112.68
	Labour:				
	for filling				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0203	Beldar	Day	0.080	₹ 300.00	₹ 24.00
0212	Helper	Day	0.080	₹ 300.00	₹ 24.00
	TOTAL				₹ 431.68
	Add for Sundries and contingencies	@	3.0%		₹ 12.95
	TOTAL				₹ 444.63
	Add 15% for contractor's profit and overheads		15%		₹ 66.69
	Cost of providing & filling for 10 mtr. length				₹ 511.32
	Cost per mtr.				₹ 51.13
	Say				₹ 51.10

19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.				
19.41.5	40 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.					
	Calculating quantity of Sand to be filled:				
	Position and depth of sand filling for 40 mm pipe:				
	Under the pipe: 75 mm				
	Above the pipe: 150 mm				
	Max. external dia of pipe: 48.80 mm				
	Total sand depth: 273.80 mm				
	Width: 300 mm				
	Qty. of Sand: $1 \times 10 \times 0.30 \times 0.2738 = 0.8214 \text{ cum}$				
	Less pipe portion: $1 \times 3.14 \times 0.0488 \times 0.0488 / 4 \times 10 = (-) 0.0187 \text{ cum}$				
	Hence Net Qty. of sand to be filled: 0.8027cum				
	Say: 0.80 cum				
	Materials:				
02002	Sand for filling	cum	0.800	₹ 300.00	₹ 240.00
	Carriage:				
0425	Sand	cum	0.800	₹ 142.63	₹ 114.10
	Labour:				
	for filling				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0203	Beldar	Day	0.080	₹ 300.00	₹ 24.00
0212	Helper	Day	0.080	₹ 300.00	₹ 24.00
	TOTAL				₹ 436.10
	Add for Sundries and contingencies	@	3.0%		₹ 13.08
	TOTAL				₹ 449.19
	Add 15% for contractor's profit and overheads		15%		₹ 67.38
	Cost of providing & filling for 10 mtr. length				₹ 516.57
	Cost per mtr.				₹ 51.66
	Say				₹ 51.70
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.				
19.41.6	50 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.					
	Calculating quantity of Sand to be filled:				
	Position and depth of sand filling for 50 mm pipe:				
	Under the pipe: 75 mm				
	Above the pipe: 150 mm				
	Max. external dia of pipe: 60.80 mm				
	Total sand depth: 285.80 mm				
	Width: 300 mm				
	Qty. of Sand: $1 \times 10 \times 0.30 \times 0.2858 = 0.8574 \text{ cum}$				
	Less pipe portion: $1 \times 3.14 \times 0.0608 \times 0.0608 / 4 \times 10 = (-) 0.0290 \text{ cum}$				
	Hence Net Qty. of sand to be filled: 0.8284cum				
	Say: 0.83 cum				
	Materials:				
02002	Sand for filling	cum	0.830	₹ 300.00	₹ 249.00
	Carriage:				
0425	Sand	cum	0.830	₹ 142.63	₹ 118.38
	Labour:				
	for filling				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0203	Beldar	Day	0.085	₹ 300.00	₹ 25.50
0212	Helper	Day	0.085	₹ 300.00	₹ 25.50
	TOTAL				₹ 452.38
	Add for Sundries and contingencies	@	3.0%		₹ 13.57

	TOTAL				₹	465.95
	Add 15% for contractor's profit and overheads		15%		₹	69.89
	Cost of providing & filling for 10 mtr. length				₹	535.85
	Cost per mtr.				₹	53.58
	Say				₹	53.60
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.					
19.41.7	65 mm diameter pipe					
Code	Description	Unit	Quantity	Rate	Amount	
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.						
	Calculating quantity of Sand to be filled:					
	Position and depth of sand filling for 65 mm pipe:					
	Under the pipe: 75 mm					
	Above the pipe: 150 mm					
	Max. external dia of pipe: 76.60 mm					
	Total sand depth: 301.60 mm					
	Width: 450 mm					
	Qty. of Sand: $1 \times 10 \times 0.45 \times 0.3016 = 1.3572$ cum					
	Less pipe portion: $1 \times 3.14 \times 0.0766 \times 0.0766 / 4 \times 10 = (-) 0.0460$ cum					
	Hence Net Qty. of sand to be filled: 1.311 cum					
	Say: 1.31 cum					
	Materials:					
02002	Sand for filling	cum	1.310	₹ 300.00	₹	393.00
	Carriage:					
0425	Sand	cum	1.310	₹ 142.63	₹	186.85
	Labour:					
	for filling					
0216	Foreman	Day	0.080	₹ 425.00	₹	34.00
0203	Beldar	Day	0.130	₹ 300.00	₹	39.00
0212	Helper	Day	0.130	₹ 300.00	₹	39.00
	TOTAL				₹	691.85
	Add for Sundries and contingencies	@	3.0%		₹	20.76
	TOTAL				₹	712.60
	Add 15% for contractor's profit and overheads		15%		₹	106.89
	Cost of providing & filling for 10 mtr. length				₹	819.49
	Cost per mtr.				₹	81.95
	Say				₹	81.90
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.					
19.41.8	80 mm diameter pipe					
Code	Description	Unit	Quantity	Rate	Amount	
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.						
	Calculating quantity of Sand to be filled:					
	Position and depth of sand filling for 80 mm pipe:					
	Under the pipe: 75 mm					
	Above the pipe: 150 mm					
	Max. external dia of pipe: 89.90 mm					
	Total sand depth: 314.90 mm					
	Width: 450 mm					
	Qty. of Sand: $1 \times 10 \times 0.45 \times 0.3149 = 1.417$ cum					
	Less pipe portion: $1 \times 3.14 \times 0.0899 \times 0.0899 / 4 \times 10 = (-) 0.063$ cum					
	Hence Net Qty. of sand to be filled: 1.354 cum					
	Say: 1.35 cum					
	Materials:					
02002	Sand for filling	cum	1.350	₹ 300.00	₹	405.00
	Carriage:					
0425	Sand	cum	1.350	₹ 142.63	₹	192.55

	Labour:				
	for filling				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0203	Beldar	Day	0.135	₹ 300.00	₹ 40.50
0212	Helper	Day	0.135	₹ 300.00	₹ 40.50
	TOTAL				₹ 712.55
	Add for Sundries and contingencies	@	3.0%		₹ 21.38
	TOTAL				₹ 733.93
	Add 15% for contractor's profit and overheads		15%		₹ 110.09
	Cost of providing & filling for 10 mtr. length				₹ 844.02
	Cost per mtr.				₹ 84.40
	Say				₹ 84.40
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.				
19.41.9	100 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.					
	Calculating quantity of Sand to be filled:				
	Position and depth of sand filling for 100 mm pipe:				
	Under the pipe: 75 mm				
	Above the pipe: 150 mm				
	Max. external dia of pipe: 115.00 mm				
	Total sand depth: 340.00 mm				
	Width: 450 mm				
	Qty. of Sand: $1 \times 10 \times 0.45 \times 0.340 = 1.53 \text{ cum}$				
	Less pipe portion: $1 \times 3.14 \times 0.115 \times 0.115 / 4 \times 10 = (-) 0.103 \text{ cum}$				
	Hence Net Qty. of sand to be filled: 1.427 cum				
	Say: 1.43 cum				
	Materials:				
02002	Sand for filling	cum	1.430	₹ 300.00	₹ 429.00
	Carriage:				
0425	Sand	cum	1.430	₹ 142.63	₹ 203.96
	Labour:				
	for filling				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0203	Beldar	Day	0.145	₹ 300.00	₹ 43.50
0212	Helper	Day	0.145	₹ 300.00	₹ 43.50
	TOTAL				₹ 762.46
	Add for Sundries and contingencies	@	3.0%		₹ 22.87
	TOTAL				₹ 785.33
	Add 15% for contractor's profit and overheads		15%		₹ 117.80
	Cost of providing & filling for 10 mtr. length				₹ 903.13
	Cost per mtr.				₹ 90.31
	Say				₹ 90.30
19.41:	Providing and filling sand of grading zone IV or fine grade around the G.I. pipes in external work.				
19.41.10	150 mm diameter pipe				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing and filling sand around G.I pipes and fittings for 10.00 mtr. length.					
	Calculating quantity of Sand to be filled:				
	Position and depth of sand filling for 150 mm pipe:				
	Under the pipe: 75 mm				
	Above the pipe: 150 mm				
	Max. external dia of pipe: 166.50 mm				
	Total sand depth: 391.50 mm				
	Width: 600 mm				
	Qty. of Sand: $1 \times 10 \times 0.60 \times 0.3915 = 2.349 \text{ cum}$				

	Less pipe portion: $1 \times 3.14 \times 0.1665 \times 0.1665 / 4 \times 10 = (-) 0.217$ cum				
	Hence Net Qty. of sand to be filled: 2.132 cum				
	Say: 2.13 cum				
	Materials:				
02002	Sand for filling	cum	2.130	₹ 300.00	₹ 639.00
	Carriage:				
0425	Sand	cum	2.130	₹ 142.63	₹ 303.80
	Labour:				
	for filling				
0216	Foreman	Day	0.150	₹ 425.00	₹ 63.75
0203	Beldar	Day	0.220	₹ 300.00	₹ 66.00
0212	Helper	Day	0.220	₹ 300.00	₹ 66.00
	TOTAL				₹ 1,138.55
	Add for Sundries and contingencies	@	3.0%		₹ 34.16
	TOTAL				₹ 1,172.71
	Add 15% for contractor's profit and overheads		15%		₹ 175.91
	Cost of providing & filling for 10 mtr. length				₹ 1,348.61
	Cost per mtr.				₹ 134.86
	Say				₹ 134.90
19.42:	Boring with 100 mm diameter casing pipe for hand pump/ tube well in all soils except ordinary hard rocks requiring blasting including removing the casing pipe after the hand pipe/tube well is lowered and tested :				
19.42.1:	Upto 6 metres depth.				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for boring with 100 mm dia casing pipe for hand pump/tube well				
	Machinaries:				
0114	Deric monkey rope and other accessories- Hire charges	Day	0.5	₹ 864.00	₹ 432.00
	Labour:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0215	Fitter (gr-I)	Day	0.50	₹ 380.00	₹ 190.00
0212	Helper	Day	3.00	₹ 300.00	₹ 900.00
	TOTAL				₹ 1,734.50
	Add for Carriage of machinery and preliminary arrangements to erect the plant etc.	@	5.0 %		₹ 86.73
	TOTAL				₹ 1,821.23
	Add for testing	@	2.50%		₹ 45.53
	TOTAL				₹ 1,866.76
	Add for towards depreciation of the casing pipe etc.	@	2.0 %		₹ 37.34
	TOTAL				₹ 1,904.09
	Add for Sundries and contingencies	@	3.0%		₹ 57.12
	TOTAL				₹ 1,961.21
	Add for water charges & electricity	@	1.0 %		₹ 19.61
	TOTAL				₹ 1,980.83
	Add 15% for contractor's profit and overheads		15%		₹ 297.12
	Cost for 6 mtr. length				₹ 2,277.95
	Cost per mtr.				₹ 379.66
	Say				₹ 379.70
19.42:	Boring with 100 mm diameter casing pipe for hand pump/ tube well in all soils except ordinary hard rocks requiring blasting including removing the casing pipe after the hand pipe/tube well is lowered and tested :				
19.42.2:	Beyond 6m and upto 12 m depth.				
	Operational input for boring with 100 mm dia casing pipe for hand pump/tube well				
	Machinaries:				

0114	Deric monkey rope and other accessories- Hire charges	Day	0.62	₹ 864.00	₹ 535.68
	Labour:				
0216	Foreman	Day	0.62	₹ 425.00	₹ 263.50
0215	Fitter (gr-I)	Day	0.62	₹ 380.00	₹ 235.60
0212	Helper	Day	3.50	₹ 300.00	₹ 1,050.00
	TOTAL				₹ 2,084.78
	Add for Carriage of machinery and preliminary arrangements to erect the plant etc.	@	4.0 %		₹ 83.39
	TOTAL				₹ 2,168.17
	Add for testing	@	2.0%		₹ 43.36
	TOTAL				₹ 2,211.53
	Add fortowards depreciation of the casing pipe etc.	@	2.0 %		₹ 44.23
	TOTAL				₹ 2,255.77
	Add for Sundries and contingencies	@	3.0%		₹ 67.67
	TOTAL				₹ 2,323.44
	Add for water charges & electricity	@	1.0 %		₹ 23.23
	TOTAL				₹ 2,346.67
	Add 15% for contractor's profit and overheads		15%		₹ 352.00
	Cost for 6 mtr. length				₹ 2,698.67
	Cost per mtr.				₹ 449.78
	Say				₹ 449.80
19.42:	Boring with 100 mm diameter casing pipe for hand pump/ tube well in all soils except ordinary hard rocks requiring blasting including removing the casing pipe after the hand pipe/tube well is lowered and tested :				
19.42.3:	Beyond 12 m and upto 18 m depth.				
	Operational input for boring with 100 mm dia casing pipe for hand pump/tube well				
	Machinaries:				
0114	Deric monkey rope and other accessories- Hire charges	Day	0.75	₹ 864.00	₹ 648.00
	Labour:				
0216	Foreman	Day	0.75	₹ 425.00	₹ 318.75
0215	Fitter (gr-I)	Day	0.75	₹ 380.00	₹ 285.00
0212	Helper	Day	4.00	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 2,451.75
	Add for Carriage of machinery and preliminary arrangements to erect the plant etc.	@	3.50 %		₹ 85.81
	TOTAL				₹ 2,537.56
	Add for testing	@	1.50%		₹ 38.06
	TOTAL				₹ 2,575.62
	Add fortowards depreciation of the casing pipe etc.	@	2.0 %		₹ 51.51
	TOTAL				₹ 2,627.14
	Add for Sundries and contingencies	@	3.0%		₹ 78.81
	TOTAL				₹ 2,705.95
	Add for water charges & electricity	@	1.0 %		₹ 27.06
	TOTAL				₹ 2,733.01
	Add 15% for contractor's profit and overheads		15%		₹ 409.95
	Cost for 6 mtr. length				₹ 3,142.96
	Cost per mtr.				₹ 523.83
	Say				₹ 523.80
19.43:	Providing and placing in position filters of 40 mm diameter G.I. pipe with brass strainer of approved quality.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one strainer 1.5 long				
	Materials				
19057	Cost of strainer 40mm diameter 1.5m long	each	1.00	₹ 580.00	₹ 580.00
	Labour:				
0216	Foreman	Day	0.07	₹ 425.00	₹ 29.75

0215	Fitter (grade-I)	Day	0.17	₹ 380.00	₹ 64.60
0212	Helper	Day	0.17	₹ 300.00	₹ 51.00
	TOTAL				₹ 725.35
	Add for carriage of pipes, hemp, white lead etc.	@	4.0%		₹ 29.01
	TOTAL				₹ 754.36
	Add for Sundries and contingencies	@	3.0%		₹ 22.63
	TOTAL				₹ 776.99
	Add 15% for contractor's profit and overheads		15%		₹ 116.55
	Cost for 1.50 mtr. length				₹ 893.54
	Cost per mtr.				₹ 595.70
	Say				₹ 595.70
19.44:	Providing and fixing to filter and lowering to proper levels 40 mm G.I. pipe for tube well including cleaning and priming the tube well.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for a depth of 10 metre				
	Materials:				
19032	40 mm dia G.I. pipe	metre	15.50	₹ 240.00	₹ 3,720.00
	Length of the pipe to be fixed: 15.00 mtr. Add wastage : 0.60 mtr. Total= 15.50 mtr.				
	Carriage:				
0427	G.I Pipes 15.50 m x 3.65 kg/m = 0.0566 t	tonne	0.0566	₹ 110.94	₹ 6.28
	Labour:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0215	Fitter (grade-I)	Day	0.50	₹ 380.00	₹ 190.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 4,322.53
	Add for hemp, white lead, oil etc.	@	0.50 %		₹ 21.61
	TOTAL				₹ 4,344.14
	Add for Sundries and contingencies	@	3.0%		₹ 130.32
	TOTAL				₹ 4,474.47
	Add 15% for contractor's profit and overheads		15%		₹ 671.17
	Cost for 15.0 mtr. length				₹ 5,145.64
	Cost per mtr.				₹ 343.04
	Say				₹ 343.00
19.45:	Providing and placing in position hand pump of approved quality for 40 mm diameter G.I. pipe complete with all accessories.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one pump				
	Materials:				
19053	Cost of hand pump	each	1.0	₹ 750.00	₹ 750.00
	Labour:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.20	₹ 380.00	₹ 76.00
0203	Beldar	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 928.50
	Add for carriage of hand pump etc.	@	5.0 %		₹ 46.43
	TOTAL				₹ 974.93
	Add for Sundries and contingencies	@	3.0%		₹ 29.25
	TOTAL				₹ 1,004.17
	Add 15% for contractor's profit and overheads		15%		₹ 150.63
	Cost for one hand pump				₹ 1,154.80
	Say				₹ 1,154.80
19.46 :	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)				

19.46.1: 15 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19040	G.I Union 15 mm nominal bore .	each	1.00	₹ 48.00	₹ 48.00
	Labour:				
0215	Fitter (grade-I)	Day	0.11	₹ 380.00	₹ 41.80
0212	Helper	Day	0.11	₹ 300.00	₹ 33.00
	TOTAL				₹ 122.80
	Add for Sundries and contingencies	@	3.0%		₹ 3.68
	TOTAL				₹ 126.48
	Add 15% for contractor's profit and overheads		15%		₹ 18.97
	Cost for per union				₹ 145.46
	Say				₹ 145.50
19.46 :	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)				
19.46.2 20 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19041	G.I Union 20 mm nominal bore .	each	1.00	₹ 64.00	₹ 64.00
	Labour:				
0215	Fitter (grade-I)	Day	0.11	₹ 380.00	₹ 41.80
0212	Helper	Day	0.11	₹ 300.00	₹ 33.00
	TOTAL				₹ 138.80
	Add for Sundries and contingencies	@	3.0%		₹ 4.16
	TOTAL				₹ 142.96
	Add 15% for contractor's profit and overheads		15%		₹ 21.44
	Cost for per union				₹ 164.41
	Say				₹ 164.40
19.46 :	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)				
19.46.3. 25 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19042	G.I Union 25 mm nominal bore .	each	1.00	₹ 80.00	₹ 80.00
	Labour:				
0215	Fitter (grade-I)	Day	0.11	₹ 380.00	₹ 41.80
0212	Helper	Day	0.11	₹ 300.00	₹ 33.00
	TOTAL				₹ 154.80
	Add for Sundries and contingencies	@	3.0%		₹ 4.64
	TOTAL				₹ 159.44
	Add 15% for contractor's profit and overheads		15%		₹ 23.92
	Cost for per union				₹ 183.36
	Say				₹ 183.40
19.46 :	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)				
19.46.4. 32 mm nominal bore					
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19043	G.I Union 32 mm nominal bore .	each	1.00	₹ 127.00	₹ 127.00
	Labour:				
0215	Fitter (grade-I)	Day	0.11	₹ 380.00	₹ 41.80
0212	Helper	Day	0.11	₹ 300.00	₹ 33.00
	TOTAL				₹ 201.80
	Add for Sundries and contingencies	@	3.0%		₹ 6.05

	TOTAL				₹	207.85
	Add 15% for contractor's profit and overheads		15%		₹	31.18
	Cost for per union				₹	239.03
	Say				₹	239.00
19.46 :	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)					
19.46.5. 40 mm nominal bore						
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19044	G.I Union 40 mm nominal bore .	each	1.00	₹ 180.00	₹	180.00
	Labour:					
0215	Fitter (grade-I)	Day	0.11	₹ 380.00	₹	41.80
0212	Helper	Day	0.11	₹ 300.00	₹	33.00
	TOTAL				₹	254.80
	Add for Sundries and contingencies	@	3.0%		₹	7.64
	TOTAL				₹	262.44
	Add 15% for contractor's profit and overheads		15%		₹	39.37
	Cost for per union				₹	301.81
	Say				₹	301.80
19.46 :	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)					
19.46.6 50 mm nominal bore						
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19045	G.I Union 50 mm nominal bore .	each	1.00	₹ 239.00	₹	239.00
	Labour:					
0215	Fitter (grade-I)	Day	0.15	₹ 380.00	₹	57.00
0212	Helper	Day	0.15	₹ 300.00	₹	45.00
	TOTAL				₹	341.00
	Add for Sundries and contingencies	@	3.0%		₹	10.23
	TOTAL				₹	351.23
	Add 15% for contractor's profit and overheads		15%		₹	52.68
	Cost for per union				₹	403.91
	Say				₹	403.90
19.46 :	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)					
19.46.7 65 mm nominal bore						
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19046	G.I Union 65 mm nominal bore .	each	1.00	₹ 420.00	₹	420.00
	Labour:					
0215	Fitter (grade-I)	Day	0.15	₹ 380.00	₹	57.00
0212	Helper	Day	0.15	₹ 300.00	₹	45.00
	TOTAL				₹	522.00
	Add for Sundries and contingencies	@	3.0%		₹	15.66
	TOTAL				₹	537.66
	Add 15% for contractor's profit and overheads		15%		₹	80.65
	Cost for per union				₹	618.31
	Say				₹	618.30

19.46 :	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)				
19.46.8	80 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19047	G.I Union 80 mm nominal bore .	each	1.00	₹ 500.00	₹ 500.00
	Labour:				
0215	Fitter (grade-I)	Day	0.15	₹ 380.00	₹ 57.00
0212	Helper	Day	0.15	₹ 300.00	₹ 45.00
	TOTAL				₹ 602.00
	Add for Sundries and contingencies	@	3.0%		₹ 18.06
	TOTAL				₹ 620.06
	Add 15% for contractor's profit and overheads		15%		₹ 93.01
	Cost for per union				₹ 713.07
	Say				₹ 713.10
19.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
19.47.1:	15 mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19040	G.I Union 15 mm nominal bore .	each	1.00	₹ 48.00	₹ 48.00
	Labour:				
	For cutting & threading pipe				
0215	Fitter (grade-I)	Day	0.150	₹ 380.00	₹ 57.00
0212	Helper	Day	0.150	₹ 300.00	₹ 45.00
	For fixing pipe				
0216	Foreman	Day	0.040	₹ 425.00	₹ 17.00
0215	Fitter (grade-I)	Day	0.125	₹ 380.00	₹ 47.50
0212	Helper	Day	0.125	₹ 300.00	₹ 37.50
	For excavation or cutting walls				
0203	Belder	Day	0.08	₹ 300.00	₹ 24.00
	TOTAL				₹ 276.00
	Add for making good the walls and refilling earth	@	7.0%		₹ 19.32
	TOTAL				₹ 295.32
	Add for Sundries and contingencies	@	3.0%		₹ 8.86
	TOTAL				₹ 304.18
	Add for water charges	@	1.0%		₹ 3.04
	TOTAL				₹ 307.22
	Add 15% for contractor's profit and overheads		15%		₹ 46.08
	Cost for per union				₹ 353.30
	Say				₹ 353.30
19.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
19.47.2:	20 mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19041	G.I Union 20 mm nominal bore .	each	1.00	₹ 64.00	₹ 64.00
	Labour:				
	For cutting & threading pipe				
0215	Fitter (grade-I)	Day	0.160	₹ 380.00	₹ 60.80
0212	Helper	Day	0.160	₹ 300.00	₹ 48.00
	For fixing pipe				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00

0215	Fitter (grade-I)	Day	0.130	₹ 380.00	₹ 49.40
0212	Helper	Day	0.130	₹ 300.00	₹ 39.00
	For excavation or cutting walls				
0203	Belder	Day	0.08	₹ 300.00	₹ 24.00
	TOTAL				₹ 319.20
	Add for making good the walls and refilling earth	@	7.0%		₹ 22.34
	TOTAL				₹ 341.54
	Add for Sundries and contingencies	@	3.0%		₹ 10.25
	TOTAL				₹ 351.79
	Add for water charges	@	1.0%		₹ 3.52
	TOTAL				₹ 355.31
	Add 15% for contractor's profit and overheads		15%		₹ 53.30
	Cost for per union				₹ 408.60
	Say				₹ 408.60
19.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
19.47.3:	25 mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19042	G.I Union 25 mm nominal bore .	each	1.00	₹ 80.00	₹ 80.00
	Labour:				
	For cutting & threading pipe				
0215	Fitter (grade-I)	Day	0.160	₹ 380.00	₹ 60.80
0212	Helper	Day	0.160	₹ 300.00	₹ 48.00
	For fixing pipe				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.130	₹ 380.00	₹ 49.40
0212	Helper	Day	0.130	₹ 300.00	₹ 39.00
	For excavation or cutting walls				
0203	Belder	Day	0.08	₹ 300.00	₹ 24.00
	TOTAL				₹ 343.70
	Add for making good the walls and refilling earth	@	7.50 %		₹ 25.78
	TOTAL				₹ 369.48
	Add for Sundries and contingencies	@	3.0%		₹ 11.08
	TOTAL				₹ 380.56
	Add for water charges	@	1.0%		₹ 3.81
	TOTAL				₹ 384.37
	Add 15% for contractor's profit and overheads		15%		₹ 57.66
	Cost for per union				₹ 442.02
	Say				₹ 442.00
19.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
19.47.4:	32 mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19043	G.I Union 32 mm nominal bore .	each	1.00	₹ 127.00	₹ 127.00
	Labour:				
	For cutting & threading pipe				
0215	Fitter (grade-I)	Day	0.180	₹ 380.00	₹ 68.40
0212	Helper	Day	0.180	₹ 300.00	₹ 54.00
	For fixing pipe				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.150	₹ 380.00	₹ 57.00
0212	Helper	Day	0.150	₹ 300.00	₹ 45.00
	For excavation or cutting walls				

0203	Belder	Day	0.08	₹ 300.00	₹ 24.00
	TOTAL				₹ 417.90
	Add for making good the walls and refilling earth	@	8.0 %		₹ 33.43
	TOTAL				₹ 451.33
	Add for Sundries and contingencies	@	3.0%		₹ 13.54
	TOTAL				₹ 464.87
	Add for water charges	@	1.0%		₹ 4.65
	TOTAL				₹ 469.52
	Add 15% for contractor's profit and overheads		15%		₹ 70.43
	Cost for per union				₹ 539.95
	Say				₹ 539.90
19.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
19.47.5:	40 mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19044	G.I Union 40 mm nominal bore .	each	1.00	₹ 180.00	₹ 180.00
	Labour:				
	For cutting & threading pipe				
0215	Fitter (grade-I)	Day	0.200	₹ 380.00	₹ 76.00
0212	Helper	Day	0.200	₹ 300.00	₹ 60.00
	For fixing pipe				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0215	Fitter (grade-I)	Day	0.150	₹ 380.00	₹ 57.00
0212	Helper	Day	0.150	₹ 300.00	₹ 45.00
	For excavation or cutting walls				
0203	Belder	Day	0.10	₹ 300.00	₹ 30.00
	TOTAL				₹ 482.00
	Add for making good the walls and refilling earth	@	7.0 %		₹ 33.74
	TOTAL				₹ 515.74
	Add for Sundries and contingencies	@	3.0%		₹ 15.47
	TOTAL				₹ 531.21
	Add for water charges	@	1.0%		₹ 5.31
	TOTAL				₹ 536.52
	Add 15% for contractor's profit and overheads		15%		₹ 80.48
	Cost for per union				₹ 617.00
	Say				₹ 617.00
19.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
19.47.6:	50 mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19045	G.I Union 50 mm nominal bore .	each	1.00	₹ 239.00	₹ 239.00
	Labour:				
	For cutting & threading pipe				
0215	Fitter (grade-I)	Day	0.300	₹ 380.00	₹ 114.00
0212	Helper	Day	0.300	₹ 300.00	₹ 90.00
	For fixing pipe				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.200	₹ 380.00	₹ 76.00
0212	Helper	Day	0.200	₹ 300.00	₹ 60.00
	For excavation or cutting walls				
0203	Belder	Day	0.10	₹ 300.00	₹ 30.00
	TOTAL				₹ 651.50
	Add for making good the walls and refilling earth	@	5.50 %		₹ 35.83

	TOTAL				₹	687.33
	Add for Sundries and contingencies	@	3.0%		₹	20.62
	TOTAL				₹	707.95
	Add for water charges	@	1.0%		₹	7.08
	TOTAL				₹	715.03
	Add 15% for contractor's profit and overheads		15%		₹	107.25
	Cost for per union				₹	822.29
	Say				₹	822.30
19.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :					
19.47.7	65 mm nominal bore.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19046	G.I Union 65 mm nominal bore .	each	1.00	₹ 420.00	₹	420.00
	Labour:					
	For cutting & threading pipe					
0215	Fitter (grade-I)	Day	0.300	₹ 380.00	₹	114.00
0212	Helper	Day	0.300	₹ 300.00	₹	90.00
	For fixing pipe					
0216	Foreman	Day	0.120	₹ 425.00	₹	51.00
0215	Fitter (grade-I)	Day	0.200	₹ 380.00	₹	76.00
0212	Helper	Day	0.200	₹ 300.00	₹	60.00
	For excavation or cutting walls					
0203	Belder	Day	0.12	₹ 300.00	₹	36.00
	TOTAL				₹	847.00
	Add for making good the walls and refilling earth	@	4.50 %		₹	38.12
	TOTAL				₹	885.12
	Add for Sundries and contingencies	@	3.0%		₹	26.55
	TOTAL				₹	911.67
	Add for water charges	@	1.0%		₹	9.12
	TOTAL				₹	920.79
	Add 15% for contractor's profit and overheads		15%		₹	138.12
	Cost for per union				₹	1,058.90
	Say				₹	1,058.90
19.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :					
19.47.8	80 mm nominal bore.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19047	G.I Union 80 mm nominal bore .	each	1.00	₹ 500.00	₹	500.00
	Labour:					
	For cutting & threading pipe					
0215	Fitter (grade-I)	Day	0.320	₹ 380.00	₹	121.60
0212	Helper	Day	0.320	₹ 300.00	₹	96.00
	For fixing pipe				₹	-
0216	Foreman	Day	0.150	₹ 425.00	₹	63.75
0215	Fitter (grade-I)	Day	0.200	₹ 380.00	₹	76.00
0212	Helper	Day	0.200	₹ 300.00	₹	60.00
	For excavation or cutting walls					
0203	Belder	Day	0.12	₹ 300.00	₹	36.00
	TOTAL				₹	953.35
	Add for making good the walls and refilling earth	@	4.50 %		₹	42.90
	TOTAL				₹	996.25
	Add for Sundries and contingencies	@	3.0%		₹	29.89
	TOTAL				₹	1,026.14

	Add for water charges	@	1.0%		₹ 10.26
	TOTAL				₹ 1,036.40
	Add 15% for contractor's profit and overheads		15%		₹ 155.46
	Cost for per union				₹ 1,191.86
	Say				₹ 1,191.90
19.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1000 litres, tank 1 no.				
	Materials:				
19048	Polyethylene water storage tank with cover and suitable locking arrangement	per litre	1000.00	₹ 7.25	₹ 7,250.00
	TOTAL				₹ 7,250.00
	Add for making necessary holes etc.	@	2.50 %		₹ 181.25
	TOTAL				₹ 7,431.25
	Add for carriage and erection, placing etc.	@	8.0%		₹ 594.50
	TOTAL				₹ 8,025.75
	Add for Sundries and contingencies	@	3.0%		₹ 240.77
	TOTAL				₹ 8,266.52
			15%		₹ 1,239.98
	Cost of tank for 1000.00 litre capacity				₹ 9,506.50
	Cost per litre				₹ 9.51
	Say				₹ 9.50
19.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931				
19.49.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19100	15 mm diameter C.P. brass bib cock	each	1.00	₹ 380.00	₹ 380.00
	TOTAL				₹ 380.00
	Add for carriage of materials and fixing charges etc.	@	5.0%		₹ 19.00
	TOTAL				₹ 399.00
	Add for Sundries and contingencies	@	3.0%		₹ 11.97
	TOTAL				₹ 410.97
	Add 15% for contractor's profit and overheads		15%		₹ 61.65
	Cost of one no. C.P. brass bib cock				₹ 472.62
	Say				₹ 472.60
19.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
19.50.1	15mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19101	15mm diameter C.P. brass long nose bib cock each		1.00	₹ 350.00	₹ 350.00
	TOTAL				₹ 350.00
	Add for carriage of materials and fixing charges etc.	@	8.0%		₹ 28.00
	TOTAL				₹ 378.00
	Add for Sundries and contingencies	@	3.0%		₹ 11.34
	TOTAL				₹ 389.34
	Add 15% for contractor's profit and overheads		15%		₹ 58.40
	Cost of one no. brass bib cock				₹ 447.74
	Say				₹ 447.70

19.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
19.51.1	15mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19102	15mm diameter C.P. brass long body bib cock each		1.00	₹ 400.00	₹ 400.00
	TOTAL				₹ 400.00
	Add for carriage of materials and fixing charges etc.	@	8.0%		₹ 32.00
	TOTAL				₹ 432.00
	Add for Sundries and contingencies	@	3.0%		₹ 12.96
	TOTAL				₹ 444.96
	Add 15% for contractor's profit and overheads		15%		₹ 66.74
	Cost of one no. brass bib cock				₹ 511.70
	Say				₹ 511.70
19.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				
19.52.1	15 mm nominal bore.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19103	15mm diameter C.P. brass stop cock (concealed)	each	1.00	₹ 430.00	₹ 430.00
	TOTAL				₹ 430.00
	Add for carriage of materials and fixing charges etc.	@	6.0%		₹ 25.80
	TOTAL				₹ 455.80
	Add for Sundries and contingencies	@	3.0%		₹ 13.67
	TOTAL				₹ 469.47
	Add 15% for contractor's profit and overheads		15%		₹ 70.42
	Cost of one no. brass stop cock				₹ 539.90
	Say				₹ 539.90
19.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
19.53.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19104	C.P. brass angle valve	each	1.00	₹ 390.00	₹ 390.00
	TOTAL				₹ 390.00
	Add for carriage of materials and fixing charges etc.	@	5.50%		₹ 21.45
	TOTAL				₹ 411.45
	Add for Sundries and contingencies	@	3.0%		₹ 12.34
	TOTAL				₹ 423.79
	Add 15% for contractor's profit and overheads		15%		₹ 63.57
	Cost of one no. angle valve				₹ 487.36
	Say				₹ 487.40
19.53 A	Providing and fixing C.P. Brass extension nipple (size 15mmx50mm) of approved make and quality as per direction of Engineer-in-charge.				
19.53.A	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
	C.P. Brass Extension Nipple (1/2"x2" size)	each	1.00	₹ 45.00	₹ 45.00
	TOTAL				₹ 45.00

	Add for carriage of materials and fixing charges etc.	@	5.50%		₹ 2.48
	TOTAL				₹ 47.48
	Add for Sundries and contingencies	@	3.0%		₹ 1.42
	TOTAL				₹ 48.90
	Add 15% for contractor's profit and overheads		15%		₹ 7.33
	Cost of one no. angle valve				₹ 56.23
	Say				₹ 56.20
19.54	Providing and fixing PTMT bib cock of approved quality and colour.				
19.54.1	15mm nominal bore, 86 mm long, weighing not less than 88 gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19105	15 mm dia P.T.M.T. bib cock	each	1.00	₹ 100.00	₹ 100.00
	TOTAL				₹ 100.00
	Add for carriage of materials and fixing charges etc.	@	11.0%		₹ 11.00
	TOTAL				₹ 111.00
	Add for Sundries and contingencies	@	3.0%		₹ 3.33
	TOTAL				₹ 114.33
	Add 15% for contractor's profit and overheads		15%		₹ 17.15
	Cost of one no. bib cock				₹ 131.48
	Say				₹ 131.50
19.54	Providing and fixing PTMT bib cock of approved quality and colour.				
19.54.2	15 mm nominal bore, 122 mm long, weighing not less than 99 gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19106	15mm dia P.T.M.T. bib cock	each	1.00	₹ 155.00	₹ 155.00
	TOTAL				₹ 155.00
	Add for carriage of materials and fixing charges etc.	@	5.0%		₹ 7.75
	TOTAL				₹ 162.75
	Add for Sundries and contingencies	@	3.0%		₹ 4.88
	TOTAL				₹ 167.63
	Add 15% for contractor's profit and overheads		15%		₹ 25.14
	Cost of one no. bib cock				₹ 192.78
	Say				₹ 192.80
19.54	Providing and fixing PTMT bib cock of approved quality and colour.				
19.54.3	15 mm nominal bore, 165 mm long, weighing not less than 110 grams.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19107	15mm dia P.T.M.T. bib cock	each	1.00	₹ 155.00	₹ 155.00
	TOTAL				₹ 155.00
	Add for carriage of materials and fixing charges etc.	@	10.0%		₹ 15.50
	TOTAL				₹ 170.50
	Add for Sundries and contingencies	@	3.0%		₹ 5.12
	TOTAL				₹ 175.62
	Add 15% for contractor's profit and overheads		15%		₹ 26.34
	Cost of one no. bib cock				₹ 201.96
	Say				₹ 202.00
19.54	Providing and fixing PTMT bib cock of approved quality and colour.				
19.54.4	15mm nominal bore, 90 mm long, weighing not less than 93 grams.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19220	15mm P.T.M.T. bib cock with nozzle.	each	1.00	₹ 130.00	₹ 130.00
	TOTAL				₹ 130.00
	Add for carriage of materials and fixing charges etc.	@	8%		₹ 10.40

	TOTAL				₹	140.40
	Add for Sundries and contingencies	@	3.0%		₹	4.21
	TOTAL				₹	144.61
	Add 15% for contractor's profit and overheads		15%		₹	21.69
	Cost of one no. bib cock				₹	166.30
	Say				₹	166.30
19.55	Providing and fixing PTMT stop cock of approved quality and colour.					
19.55.1	15 mm nominal bore, 86mm long, weighing not less than 88 grams.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19108	15mm dia P.T.M.T. stop cock	each	1.00	₹ 100.00	₹	100.00
	TOTAL				₹	100.00
	Add for carriage of materials and fixing charges etc.	@	11.0%		₹	11.00
	TOTAL				₹	111.00
	Add for Sundries and contingencies	@	3.0%		₹	3.33
	TOTAL				₹	114.33
	Add 15% for contractor's profit and overheads		15%		₹	17.15
	Cost of one no. stop cock				₹	131.48
	Say				₹	131.50
19.55	Providing and fixing PTMT stop cock of approved quality and colour.					
19.55.2	20 mm nominal bore, 89mm long, weighing not less than 88 grams.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19109	20 mm dia P.T.M.T. stop cock	each	1.00	₹ 135.00	₹	135.00
	TOTAL				₹	135.00
	Add for carriage of materials and fixing charges etc.	@	10.0%		₹	13.50
	TOTAL				₹	148.50
	Add for Sundries and contingencies	@	3.0%		₹	4.46
	TOTAL				₹	152.96
	Add 15% for contractor's profit and overheads		15%		₹	22.94
	Cost of one no. stop cock				₹	175.90
	Say				₹	175.90
19.55	Providing and fixing PTMT stop cock of approved quality and colour.					
19.55.3	Concealed stop cock, 15mm nominal bore, 108mm long, weighing not less than 108 grams.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19221	P.T.M.T. stop cock (concealed) 15 mm	each	1.00	₹ 150.00	₹	150.00
	TOTAL				₹	150.00
	Add for carriage of materials and fixing charges etc.	@	7.50%		₹	11.25
	TOTAL				₹	161.25
	Add for Sundries and contingencies	@	3.0%		₹	4.84
	TOTAL				₹	166.09
	Add 15% for contractor's profit and overheads		15%		₹	24.91
	Cost of one no. stop cock				₹	191.00
	Say				₹	191.00
19.56	Providing and fixing PTMT pillar cock of approved quality and colour .					
19.56.1	15mm nominal bore, 107mm long, weighing not less than 110 grams.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no.					
	Materials:					
19110	15 mm dia P.T.M.T. pillar cock	each	1.00	₹ 145.00	₹	145.00
	TOTAL				₹	145.00

	Add for carriage of materials and fixing charges etc.	@	8.0%		₹ 11.60
	TOTAL				₹ 156.60
	Add for Sundries and contingencies	@	3.0%		₹ 4.70
	TOTAL				₹ 161.30
	Add 15% for contractor's profit and overheads		15%		₹ 24.19
	Cost of one no. Pillar cock				₹ 185.49
	Say				₹ 185.50
19.56	Providing and fixing PTMT pillar cock of approved quality and colour .				
19.56.2	15mm nominal bore, 125mm long foam flow, Weighing not less than 120 gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19106	15mm dia P.T.M.T. bib cockwith flange (fancy) each		1.00	₹ 155.00	₹ 155.00
	TOTAL				₹ 155.00
	Add for carriage of materials and fixing charges etc.	@	6.0%		₹ 9.30
	TOTAL				₹ 164.30
	Add for Sundries and contingencies	@	3.0%		₹ 4.93
	TOTAL				₹ 169.23
	Add 15% for contractor's profit and overheads		15%		₹ 25.38
	Cost of one no. Pillar cock				₹ 194.61
	Say				₹ 194.60
19.57	Providing and fixing PTMT, push cock of approved quality and colour.				
19.57.1	15 mm nominal bore, 98mm long, Weighing not less than 75 gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19111	15mm P.T.M.T. push cock	each	1.00	₹ 90.00	₹ 90.00
	TOTAL				₹ 90.00
	Add for carriage of materials and fixing charges etc.	@	12.0%		₹ 10.80
	TOTAL				₹ 100.80
	Add for Sundries and contingencies	@	3.0%		₹ 3.02
	TOTAL				₹ 103.82
	Add 15% for contractor's profit and overheads		15%		₹ 15.57
	Cost of one no. push cock				₹ 119.40
	Say				₹ 119.40
19.57	Providing and fixing PTMT, push cock of approved quality and colour.				
19.57.2	15 mm nominal bore, 80mm long, Weighing not less than 46 gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19112	P.T.M.T. push cock 12mm dia 20 mm BSP	each	1.00	₹ 82.00	₹ 82.00
	TOTAL				₹ 82.00
	Add for carriage of materials and fixing charges etc.	@	14.0%		₹ 11.48
	TOTAL				₹ 93.48
	Add for Sundries and contingencies	@	3.0%		₹ 2.80
	TOTAL				₹ 96.28
	Add 15% for contractor's profit and overheads		15%		₹ 14.44
	Cost of one no. push cock				₹ 110.73
	Say				₹ 110.70
19.58	Providing and fixing PTMT grating of approved quality and colour.				

19.58.1	Circular type.				
19.58.1.1	100 mm nominal dia.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19113	100mm dia P.T.M.T. grating	each	1.00	₹ 26.00	₹ 26.00
	TOTAL				₹ 26.00
	Add for carriage of materials and fixing charges etc.	@	20.0%		₹ 5.20
	TOTAL				₹ 31.20
	Add for Sundries and contingencies	@	3.0%		₹ 0.94
	TOTAL				₹ 32.14
	Add 15% for contractor's profit and overheads		15%		₹ 4.82
	Cost of one no. grating				₹ 36.96
	Say				₹ 37.00
19.58	Providing and fixing PTMT grating of approved quality and colour.				
19.58.1	Circular type.				
19.58.1.2	125 mm nominal dia with 25 mm waste hole.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19115	125 mm dia P.T.M.T. grating	each	1.00	₹ 35.00	₹ 35.00
	TOTAL				₹ 35.00
	Add for carriage of materials and fixing charges etc.	@	17.0%		₹ 5.95
	TOTAL				₹ 40.95
	Add for Sundries and contingencies	@	3.0%		₹ 1.23
	TOTAL				₹ 42.18
	Add 15% for contractor's profit and overheads		15%		₹ 6.33
	Cost of one no. grating				₹ 48.51
	Say				₹ 48.50
19.58	Providing and fixing PTMT grating of approved quality and colour.				
19.58.2	Rectangular type with openable circular lid.				
19.58.2.1	150 mm nominal size square 100 mm diameter of the inner hinged round grating.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19116	150mm size square P.T.M.T. grating	each	1.00	₹ 125.00	₹ 125.00
	TOTAL				₹ 125.00
	Add for carriage of materials and fixing charges etc.	@	7.50%		₹ 9.38
	TOTAL				₹ 134.38
	Add for Sundries and contingencies	@	3.0%		₹ 4.03
	TOTAL				₹ 138.41
	Add 15% for contractor's profit and overheads		15%		₹ 20.76
	Cost of one no. grating				₹ 159.17
	Say				₹ 159.20
AIR VALVE & WATER METER (BULK TYPE)					
19.59	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc if required will be paid separately):				
19.59.1	50 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos. double acting air valve				
	Materials:				
	Dia of pipe = 50 mm				
	Dia of Flange (out to out) = (170 x 170) mm				
	Size of rubber Insertation = 0.029 sqm.				
19117	50 mm dia, double acting air valve	each	10.00	₹ 4,000.00	₹ 40,000.00

19012	3 mm thick Rubber Insertation	each	10.00	₹ 13.00	₹ 130.00
19079	16 mm dia 60 mm long Bolts & Nuts	each	40.00	₹ 12.00	₹ 480.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.150	₹ 425.00	₹ 63.75
0215	Fitter (grade-I)	Day	0.500	₹ 380.00	₹ 190.00
0212	Helper	Day	0.500	₹ 300.00	₹ 150.00
	TOTAL				₹ 41,013.75
	Add for carriage of materials and Ropes, ballies, white lead etc.	@	1.25%		₹ 512.67
	TOTAL				₹ 41,526.42
	Add for Sundries and contingencies	@	3.0%		₹ 1,245.79
	TOTAL				₹ 42,772.21
	Add 15% for contractor's profit and overheads		15%		₹ 6,415.83
	Cost of 10 nos valves.				₹ 49,188.05
	Cost of one no. valve.				₹ 4,918.80
	Say				₹ 4,918.80
19.59	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc if required will be paid separately):				
19.59.2	80 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos. double acting air valve				
	Materials:				
	Dia of pipe = 80 mm				
	Dia of Flange (out to out) = (200 x 200) mm				
	Size of rubber Insertation = 0.04 sqm.				
19118	80 mm dia, double acting air valve	each	10.00	₹ 5,000.00	₹ 50,000.00
19012	3 mm thick Rubber Insertation	each	10.00	₹ 13.00	₹ 130.00
19079	16 mm dia 60 mm long Bolts & Nuts	each	40.00	₹ 12.00	₹ 480.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.150	₹ 425.00	₹ 63.75
0215	Fitter (grade-I)	Day	0.600	₹ 380.00	₹ 228.00
0212	Helper	Day	0.600	₹ 300.00	₹ 180.00
	TOTAL				₹ 51,081.75
	Add for carriage of materials and Ropes, ballies, white lead etc.	@	1.0%		₹ 510.82
	TOTAL				₹ 51,592.57
	Add for Sundries and contingencies	@	3.0%		₹ 1,547.78
	TOTAL				₹ 53,140.34
	Add 15% for contractor's profit and overheads		15%		₹ 7,971.05
	Cost of 10 nos valves.				₹ 61,111.40
	Cost of one no. valve.				₹ 6,111.14
	Say				₹ 6,111.10
19.59	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc if required will be paid separately):				
19.59.3	100 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 nos. double acting air valve				
	Materials:				
	Dia of pipe = 100 mm				
	Dia of Flange (out to out) = (220 x 220) mm				
	Size of rubber Insertation = 0.05 sqm.				
19119	100 mm dia, double acting air valve	each	10.00	₹ 6,500.00	₹ 65,000.00
19013	3 mm thick Rubber Insertation	each	10.00	₹ 17.00	₹ 170.00
19079	16 mm dia 60 mm long Bolts & Nuts	each	40.00	₹ 12.00	₹ 480.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.200	₹ 425.00	₹ 85.00
0215	Fitter (grade-I)	Day	0.800	₹ 380.00	₹ 304.00

0212	Helper	Day	0.800	₹ 300.00	₹ 240.00
	TOTAL				₹ 66,279.00
	Add for carriage of materials and Ropes, ballies, white lead etc.	@	1.0%		₹ 662.79
	TOTAL				₹ 66,941.79
	Add for Sundries and contingencies	@	3.0%		₹ 2,008.25
	TOTAL				₹ 68,950.04
	Add 15% for contractor's profit and overheads		15%		₹ 10,342.51
	Cost of 10 nos valves.				₹ 79,292.55
	Cost of one no. valve.				₹ 7,929.26
	Say				₹ 7,929.30
19.60	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately):				
19.60.1	80 mm dia nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no. water meter				
	Materials:				
	Dia of pipe = 80 mm				
	Dia of Flange (out to out) = (200 x 200) mm				
	Size of rubber Insertation = 0.04 sqm.				
19120	80 mm dia. water meter (duly tested)	each	1.00	₹ 2,400.00	₹ 2,400.00
19013	3 mm thick Rubber Insertation (double)	each	2.00	₹ 17.00	₹ 34.00
19079	16 mm dia 60 mm long Bolts & Nuts	each	8.00	₹ 12.00	₹ 96.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.200	₹ 380.00	₹ 76.00
0212	Helper	Day	0.200	₹ 300.00	₹ 60.00
	TOTAL				₹ 2,708.50
	Add for carriage of materials etc.	@	1.0%		₹ 27.09
	TOTAL				₹ 2,735.59
	Add for and Ropes, ballies, Pulleys, crowbar and white lead etc.	@	1.0%		₹ 27.36
	TOTAL				₹ 2,762.94
	Add for Sundries and contingencies	@	3.0%		₹ 82.89
	TOTAL				₹ 2,845.83
	Add 15% for contractor's profit and overheads		15%		₹ 426.87
	Cost of one no water meter.				₹ 3,272.70
	Say				₹ 3,272.70
19.60	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately):				
19.60.2	100 mm dia nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no. water meter				
	Materials:				
	Dia of pipe = 100 mm				
	Dia of Flange (out to out) = (220 x 220) mm				
	Size of rubber Insertation = 0.05 sqm.				
19121	100 mm dia. water meter (duly tested)	each	1.00	₹ 3,500.00	₹ 3,500.00
19013	3 mm thick Rubber Insertation (double)	each	2.00	₹ 17.00	₹ 34.00
19079	16 mm dia 60 mm long Bolts & Nuts	each	16.00	₹ 12.00	₹ 192.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0215	Fitter (grade-I)	Day	0.250	₹ 380.00	₹ 95.00
0212	Helper	Day	0.250	₹ 300.00	₹ 75.00
	TOTAL				₹ 3,949.13

	Add for carriage of materials etc.	@	1.0 %		₹ 39.49
	TOTAL				₹ 3,988.62
	Add for and Ropes, ballies, Pulleys, crowbar and white lead etc.	@	1.0 %		₹ 39.89
	TOTAL				₹ 4,028.50
	Add for Sundries and contingencies	@	3.0%		₹ 120.86
	TOTAL				₹ 4,149.36
	Add 15% for contractor's profit and overheads		15%		₹ 622.40
	Cost of one no water meter.				₹ 4,771.76
	Say				₹ 4,771.80
19.60	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately):				
19.60.3	150 mm dia nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no. water meter				
	Materials:				
	Dia of pipe = 150 mm				
	Dia of Flange (out to out) = (285 x 285) mm				
	Size of rubber Insertation = 0.082 sqm.				
19122	150 mm dia. water meter (duly tested)	each	1.00	₹ 5,000.00	₹ 5,000.00
19015	3 mm thick Rubber Insertation (double)	each	2.00	₹ 22.00	₹ 44.00
19081	20 mm dia 65 mm long Bolts & Nuts	each	16.00	₹ 17.00	₹ 272.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.150	₹ 425.00	₹ 63.75
0215	Fitter (grade-I)	Day	0.350	₹ 380.00	₹ 133.00
0212	Helper	Day	0.350	₹ 300.00	₹ 105.00
	TOTAL				₹ 5,617.75
	Add for carriage of materials etc.	@	1.0 %		₹ 56.18
	TOTAL				₹ 5,673.93
	Add for and Ropes, ballies, Pulleys, crowbar and white lead etc.	@	1.0 %		₹ 56.74
	TOTAL				₹ 5,730.67
	Add for Sundries and contingencies	@	3.0%		₹ 171.92
	TOTAL				₹ 5,902.59
	Add 15% for contractor's profit and overheads		15%		₹ 885.39
	Cost of one no water meter.				₹ 6,787.97
	Say				₹ 6,788.00
19.60	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately):				
19.60.4	200 mm dia nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no. water meter				
	Materials:				
	Dia of pipe = 200 mm				
	Dia of Flange (out to out) = (340 x 340) mm				
	Size of rubber Insertation = 0.116 sqm.				
19123	200 mm dia. water meter (duly tested)	each	1.00	₹ 5,800.00	₹ 5,800.00
19016	3 mm thick Rubber Insertation (double)	each	2.00	₹ 29.00	₹ 58.00
19082	20 mm dia 70 mm long Bolts & Nuts	each	16.00	₹ 17.00	₹ 272.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.200	₹ 425.00	₹ 85.00
0215	Fitter (grade-I)	Day	0.400	₹ 380.00	₹ 152.00
0212	Helper	Day	0.400	₹ 300.00	₹ 120.00
	TOTAL				₹ 6,487.00

	Add for carriage of materials etc.	@	1.0 %		₹ 64.87
	TOTAL				₹ 6,551.87
	Add for and Ropes, ballies, Pulleys, crowbar and white lead etc.	@	1.0 %		₹ 65.52
	TOTAL				₹ 6,617.39
	Add for Sundries and contingencies	@	3.0%		₹ 198.52
	TOTAL				₹ 6,815.91
	Add 15% for contractor's profit and overheads		15%		₹ 1,022.39
	Cost of one no water meter.				₹ 7,838.30
	Say				₹ 7,838.30
19.61	Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. complete conforming to IS : 2373 :				
19.61.1	80 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no. dirt box strainer				
	Materials:				
19124	80 mm dia. dirt box strainer	each	1.00	₹ 2,800.00	₹ 2,800.00
19012	3 mm thick Rubber Insertation	each	2.00	₹ 13.00	₹ 26.00
19079	16 mm dia 60 mm long Bolts & Nuts	each	8.00	₹ 12.00	₹ 96.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.200	₹ 380.00	₹ 76.00
0212	Helper	Day	0.400	₹ 300.00	₹ 120.00
	TOTAL				₹ 3,160.50
	Add for carriage of materials etc.	@	1.0 %		₹ 31.61
	TOTAL				₹ 3,192.11
	Add for and Ropes, ballies, Pulleys, crowbar and white lead etc.	@	1.0 %		₹ 31.92
	TOTAL				₹ 3,224.03
	Add for Sundries and contingencies	@	3.0%		₹ 96.72
	TOTAL				₹ 3,320.75
	Add 15% for contractor's profit and overheads		15%		₹ 498.11
	Rate of per box strainer				₹ 3,818.86
	Say				₹ 3,818.90
19.61	Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. complete conforming to IS : 2373 :				
19.61.2	100 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no. dirt box strainer				
	Materials:				
19125	100 mm dia. dirt box strainer	each	1.00	₹ 4,600.00	₹ 4,600.00
19013	3 mm thick Rubber Insertation	each	2.00	₹ 17.00	₹ 34.00
19079	16 mm dia 60 mm long Bolts & Nuts	each	16.00	₹ 12.00	₹ 192.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0215	Fitter (grade-I)	Day	0.270	₹ 380.00	₹ 102.60
0212	Helper	Day	0.270	₹ 300.00	₹ 81.00
	TOTAL				₹ 5,062.73
	Add for carriage of materials etc.	@	0.65 %		₹ 32.91
	TOTAL				₹ 5,095.63
	Add for and Ropes, ballies, Pulleys, crowbar and white lead etc.	@	0.65 %		₹ 33.12
	TOTAL				₹ 5,128.75

	Add for Sundries and contingencies	@	3.0%		₹ 153.86
	TOTAL				₹ 5,282.62
	Add 15% for contractor's profit and overheads		15%		₹ 792.39
	Rate of per box strainer				₹ 6,075.01
	Say				₹ 6,075.00
19.61	Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. complete conforming to IS : 2373 :				
19.61.3	150 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no. dirt box strainer				
	Materials:				
19126	150 mm dia. dirt box strainer	each	1.00	₹ 5,600.00	₹ 5,600.00
19015	3 mm thick Rubber Insertation	each	2.00	₹ 22.00	₹ 44.00
19081	20 mm dia 65 mm long Bolts & Nuts	each	16.00	₹ 17.00	₹ 272.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.150	₹ 425.00	₹ 63.75
0215	Fitter (grade-I)	Day	0.320	₹ 380.00	₹ 121.60
0212	Helper	Day	0.320	₹ 300.00	₹ 96.00
	TOTAL				₹ 6,197.35
	Add for carriage of materials etc.	@	0.60 %		₹ 37.18
	TOTAL				₹ 6,234.53
	Add for and Ropes, ballies, Pulleys, crowbar and white lead etc.	@	0.60 %		₹ 37.41
	TOTAL				₹ 6,271.94
	Add for Sundries and contingencies	@	3.0%		₹ 188.16
	TOTAL				₹ 6,460.10
	Add 15% for contractor's profit and overheads		15%		₹ 969.01
	Rate of per box strainer				₹ 7,429.11
	Say				₹ 7,429.10
19.61	Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. complete conforming to IS : 2373 :				
19.61.4	200 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no. dirt box strainer				
	Materials:				
19127	200 mm dia. dirt box strainer	each	1.00	₹ 8,400.00	₹ 8,400.00
19016	3 mm thick Rubber Insertation	each	2.00	₹ 29.00	₹ 58.00
19082	20 mm dia 70 mm long Bolts & Nuts	each	16.00	₹ 17.00	₹ 272.00
	Labour:				
	For laying & joining				
0216	Foreman	Day	0.200	₹ 425.00	₹ 85.00
0215	Fitter (grade-I)	Day	0.420	₹ 380.00	₹ 159.60
0212	Helper	Day	0.420	₹ 300.00	₹ 126.00
	TOTAL				₹ 9,100.60
	Add for carriage of materials etc.	@	0.55 %		₹ 50.05
	TOTAL				₹ 9,150.65
	Add for and Ropes, ballies, Pulleys, crowbar and white lead etc.	@	0.55 %		₹ 50.33
	TOTAL				₹ 9,200.98
	Add for Sundries and contingencies	@	3.0%		₹ 276.03
	TOTAL				₹ 9,477.01
	Add 15% for contractor's profit and overheads		15%		₹ 1,421.55
	Rate of per box strainer				₹ 10,898.56
	Say				₹ 10,898.60

19.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated rod with L.P./H.P.H.D. plastic ball.				
19.62.1	15 mm nominal bore, 105mm long, weighing not less than 138gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
19128	P.T.M.T. ball cock 15 mm complete with aluminium rod & H.D. ball	each	1.00	₹ 120.00	₹ 120.00
	TOTAL				₹ 120.00
	Add for carriage of materials and fixing charges etc.	@	21.0%		₹ 25.20
	TOTAL				₹ 145.20
	Add for Sundries and contingencies	@	3.0%		₹ 4.36
	TOTAL				₹ 149.56
	Add 15% for contractor's profit and overheads		15%		₹ 22.43
	Cost of one Ball cock				₹ 171.99
	Say				₹ 172.00
19.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated rod with L.P./H.P.H.D. plastic ball.				
19.62.2	20 mm nominal bore, 120mm long, weighing not less than 198gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
19129	P.T.M.T. ball cock 20 mm complete with aluminium rod & H.D. ball	each	1.00	₹ 175.00	₹ 175.00
	TOTAL				₹ 175.00
	Add for carriage of materials and fixing charges etc.	@	18.0%		₹ 31.50
	TOTAL				₹ 206.50
	Add for Sundries and contingencies	@	3.0%		₹ 6.20
	TOTAL				₹ 212.70
	Add 15% for contractor's profit and overheads		15%		₹ 31.90
	Cost of one Ball cock				₹ 244.60
	Say				₹ 244.60
19.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated rod with L.P./H.P.H.D. plastic ball.				
19.62.3	25 mm nominal bore, 152mm long, weighing not less than 440gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
19130	P.T.M.T. ball cock 25 mm complete with aluminium rod & H.D. ball	each	1.0	₹ 340.00	₹ 340.00
	TOTAL				₹ 340.00
	Add for carriage of materials and fixing charges etc.	@	9.50%		₹ 61.20
	TOTAL				₹ 401.20
	Add for Sundries and contingencies	@	3.0%		₹ 12.04
	TOTAL				₹ 413.24
	Add 15% for contractor's profit and overheads		15%		₹ 61.99
	Cost of one Ball cock				₹ 475.22
	Say				₹ 475.20
19.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated rod with L.P./H.P.H.D. plastic ball.				
19.62.4	40mm nominal bore, 206mm long, weighing not less than 690gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials:				

19131	PTMT Ball Cock 40mm Complete with Epoxy Coated Aluminium Rod & H.D. Ball	Each	1.00	₹ 560.00	₹ 560.00
	TOTAL				₹ 560.00
	Add for carriage of materials and fixing charges etc.	@	7.0%		₹ 39.20
	TOTAL				₹ 599.20
	Add for Sundries and contingencies	@	3.0%		₹ 17.98
	TOTAL				₹ 617.18
	Add 15% for contractor's profit and overheads		15%		₹ 92.58
	Cost of one Ball cock				₹ 709.75
	Say				₹ 709.80
19.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated rod with L.P./H.P.H.D. plastic ball.				
19.62.5	50 mm nominal bore, 242 mm long, weighing not less than 1240gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials:				
19132	Ball Cock 50mm Complete with Epoxy Coated Aluminium Rod & H.D. Ball	Each	1.00	₹ 1,010.00	₹ 1,010.00
	TOTAL				₹ 1,010.00
	Add for carriage of materials and fixing charges etc.	@	6.0%		₹ 60.60
	TOTAL				₹ 1,070.60
	Add for Sundries and contingencies	@	3.0%		₹ 32.12
	TOTAL				₹ 1,102.72
	Add 15% for contractor's profit and overheads		15%		₹ 165.41
	Cost of one Ball cock				₹ 1,268.13
	Say				₹ 1,268.10
19.63	Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not less than 85gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
19133	P.T.M.T. angle stop cock 15 mm dia with flange	each	1.0	₹ 110.00	₹ 110.00
	TOTAL				₹ 110.00
	Add for carriage of materials and fixing charges etc.	@	10.0%		₹ 11.00
	TOTAL				₹ 121.00
	Add for Sundries and contingencies	@	3.0%		₹ 3.63
	TOTAL				₹ 124.63
	Add 15% for contractor's profit and overheads		15%		₹ 18.69
	Cost of one angle stop cock				₹ 143.32
	Say				₹ 143.30
19.64	Providing and fixing PTMT swivelling shower, 15 mm nominal bore, weighing not less than 40gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
19134	Swiveling shower 15 mm	each	1.00	₹ 80.00	₹ 80.00
	TOTAL				₹ 80.00
	Add for carriage of materials and fixing charges etc.	@	12.0%		₹ 9.60
	TOTAL				₹ 89.60
	Add for Sundries and contingencies	@	3.0%		₹ 2.69
	TOTAL				₹ 92.29
	Add 15% for contractor's profit and overheads		15%		₹ 13.84
	Rate per shower				₹ 106.13
	Say				₹ 106.10

19.65	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements weighing not less than 106 gms.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
19135	Soap Dish/Holder 138x102x75mm	Each	1.00	₹ 90.00	₹ 90.00
	TOTAL				₹ 90.00
	Add for carriage of materials and fixing charges etc.	@	10.0%		₹ 9.00
	TOTAL				₹ 99.00
	Add for Sundries and contingencies	@	3.0%		₹ 2.97
	TOTAL				₹ 101.97
	Add 15% for contractor's profit and overheads		15%		₹ 15.30
	Rate per shower				₹ 117.27
	Say				₹ 117.30
19.66	Providing and laying S&S C.I. Standard specials such as tees, bends, collars tapers and caps etc, suitable for flanged jointing as per IS : 1538 :				
19.66.1	Upto 300 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 quintal				
	Materials :-				
	Consider the avg. wt. of 200mm dia bends for upto 300 mm dia bend=0.67q.				
19192	Cost of specials	quintal	0.67	₹ 5,150.00	₹ 3,450.50
0407	Carriage of material	t	0.067	₹ 110.94	₹ 7.43
	Labour:				
	Labour for lowering & laying				₹ -
0215	Fitter (grade-1)	Day	0.120	₹ 380.00	₹ 45.60
0214	Fitter (2nd Class)	Day	0.200	₹ 300.00	₹ 60.00
0212	Helper	Day	0.325	₹ 300.00	₹ 97.50
	TOTAL				₹ 3,661.03
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	3.250 %		₹ 118.98
	TOTAL				₹ 157.50
	Add for Barricading and Night Lamps and watchman	@	2.20%		₹ 3.47
	TOTAL				₹ 3,780.02
	Add for Sundries and contingencies	@	3.0%		₹ 113.40
	TOTAL				₹ 3,893.42
	Add 15% for contractor's profit and overheads	@	15%		₹ 584.01
	Cost for 0.67 quintal				₹ 4,477.43
	Cost per quintal				₹ 6,682.73
	Say				₹ 6,682.70
19.66	Providing and laying S&S C.I. Standard specials such as tees, bends, collars tapers and caps etc, suitable for flanged jointing as per IS : 1538 :				
19.66.2	Above 300 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 quintal				
	Materials :-				
	Consider the avg. wt. of 400 mm dia bends for over 300 mm dia bend=2.34 q.				
19193	Cost of specials	quintal	2.340	₹ 6,250.00	₹ 14,625.00
0407	Carriage of material	t	0.234	₹ 110.94	₹ 25.96
	Labour:				
	Labour for lowering & laying				
0215	Fitter (grade-1)	Day	0.250	₹ 380.00	₹ 95.00
0214	Fitter (2nd Class)	Day	0.550	₹ 300.00	₹ 165.00

0212	Helper	Day	1.200	₹ 300.00	₹ 360.00
	TOTAL				₹ 15,270.96
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	2.0 %		₹ 305.42
	TOTAL				₹ 15,576.38
	Add for Barricading and Night Lamps and watchman	@	2.0%		₹ 311.53
	TOTAL				₹ 15,576.38
	Add for Sundries and contingencies	@	3.0%		₹ 467.29
	TOTAL				₹ 16,043.67
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,406.55
	Cost for 2.34 quintal				₹ 18,450.22
	Cost per quintal				₹ 7,884.71
	Say				₹ 7,884.70
19.67	Providing and laying S&S C.I. Standard specials suitable for mechanical jointing as per IS : 13382				
19.67.1	Upto 300 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 quintal				
	Materials :-				
	Consider one No. 250 mm dia bends of weight 0.80 q per bend.				
19194	Cost of specials	quintal	0.80	₹ 8,500.00	₹ 6,800.00
0407	Carriage of material	t	0.080	₹ 110.94	₹ 8.88
	Labour:				
	Labour for lowering & laying				
0215	Fitter (grade-1)	Day	0.100	₹ 380.00	₹ 38.00
0214	Fitter (2nd Class)	Day	0.125	₹ 300.00	₹ 37.50
0212	Helper	Day	0.45	₹ 300.00	₹ 135.00
	TOTAL				₹ 7,019.38
	Add for mechanical jointing & Pulleys, Ropes, Crow bars ,ballies etc.	@	2.0 %		₹ 140.39
	TOTAL				₹ 7,159.76
	Add for Barricading and Night Lamps and watchman	@	2.0 %		₹ 143.20
	TOTAL				₹ 7,302.96
	Add for Sundries and contingencies	@	3.0%		₹ 219.09
	TOTAL				₹ 7,522.05
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,128.31
	Cost for 0.80 quintal				₹ 8,650.35
	Cost per quintal				₹ 10,812.94
	Say				₹ 10,812.90
19.67	Providing and laying S&S C.I. Standard specials suitable for mechanical jointing as per IS : 13382				
19.67.2	Above 300 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 1 quintal				
	Materials :-				
	Consider one No. 500 mm dia bends of weight 4.46 q per bend.				
19195	Cost of specials	quintal	4.46	₹ 9,100.00	₹ 40,586.00
0407	Carriage of material	t	0.080	₹ 110.94	₹ 8.88
	Labour:				
	Labour for lowering & laying				₹ -
0215	Fitter (grade-1)	Day	0.400	₹ 380.00	₹ 152.00
0214	Fitter (2nd Class)	Day	1.100	₹ 300.00	₹ 330.00
0212	Helper	Day	2.10	₹ 300.00	₹ 630.00

	TOTAL				₹ 41,706.88
	Add for mechanical jointing & Pulleys, Ropes, Crow bars ,ballies etc.	@	2.50 %		₹ 1,042.67
	TOTAL				₹ 42,749.55
	Add for Barricading and Night Lamps and watchman	@	2.00 %		₹ 854.99
	TOTAL				₹ 43,604.54
	Add for Sundries and contingencies	@	3.0%		₹ 1,308.14
	TOTAL				₹ 44,912.67
	Add 15% for contractor's profit and overheads	@	15%		₹ 6,736.90
	Cost for 4.46 quintal				₹ 51,649.58
	Cost per quintal				₹ 11,580.62
	Say				₹ 11,580.60
19.68	Providing and laying D.I. specials of class K-12 suitable for push-on jointing as per IS : 9523				
19.68.1	Upto 600 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying D.I Specials of class K-12 for specials weighing 3.66 q.				
	Materials :-				
	Consider the weight of 2 nos. 500 mm dia 90 degree double socket bends for specials upto 600 mm dia.				
19166	90 degree Double socket Bends	quintal	3.66	₹ 12,000.00	₹ 43,920.00
	=2x183 kg=366 kg or 3.66 q.				
0407	Carriage of material	t	0.366	₹ 110.94	₹ 40.60
	Labour:				
	Labour for lowering & laying				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.500	₹ 380.00	₹ 190.00
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
	TOTAL				₹ 44,793.10
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.10 %		₹ 44.79
	TOTAL				₹ 44,837.90
	Add for Barricading and Night Lamps and watchman	@	0.15 %		₹ 67.26
	TOTAL				₹ 44,905.15
	Add for Sundries and contingencies	@	3.0%		₹ 1,347.15
	TOTAL				₹ 46,252.31
	Add 15% for contractor's profit and overheads	@	15%		₹ 6,937.85
	Cost for 3.66 quintal				₹ 53,190.15
	Cost per quintal				₹ 14,532.83
	Say				₹ 14,532.80
19.68	Providing and laying D.I. specials of class K-12 suitable for push-on jointing as per IS : 9523				
19.68.2	Above 600 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying D.I Specials of class K-12 for specials weighing 9.1 q.				
	Materials :-				
	Consider the weight of dia and 2 nos. 700 mm dia 90 degree double socket bends for specials above 600 mm dia.				
19167	90 degree Double socket Bends	quintal	9.10	₹ 18,000.00	₹ 163,800.00
	=2x 455 kg= 910 kg or 9.10 q.				

0407	Carriage of material	t	0.910	₹ 110.94	₹ 100.96
	Labour:				
	Labour for lowering & laying				
0216	Foreman	Day	0.150	₹ 425.00	₹ 63.75
0215	Fitter (grade-I)	Day	1.250	₹ 380.00	₹ 475.00
0212	Helper	Day	5.00	₹ 300.00	₹ 1,500.00
	TOTAL				₹ 165,939.71
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.03 %		₹ 49.78
	TOTAL				₹ 165,989.49
	Add for Barricading and Night Lamps and watchman	@	0.05 %		₹ 82.99
	TOTAL				₹ 166,072.48
	Add for Sundries and contingencies	@	3.0%		₹ 4,982.17
	TOTAL				₹ 171,054.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 25,658.20
	Cost for 9.10 quintal				₹ 196,712.85
	Cost per quintal				₹ 21,616.80
	Say				₹ 21,616.80
19.69	Providing and laying D.I Specials of Class K-12suitable for mechanical jointing as per IS :9523				
19.69.1	Upto 600 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying D.I Specials of class K-12 for specials weighing 3.66 q.				
	Materials :-				
	Consider the weight of 2 nos. 500 mm dia 90 degree double socket bends for specials upto 600 mm dia.				
19168	90 degree Double socket Bends	quintal	3.66	₹ 13,451.00	₹ 49,230.66
	=2x183 kg=366 kg or 3.66 q.				
0407	Carriage of material	t	0.366	₹ 110.94	₹ 40.60
	Labour:				
	Labour for lowering & laying				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.500	₹ 380.00	₹ 190.00
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
	TOTAL				₹ 50,103.76
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.10 %		₹ 50.10
	TOTAL				₹ 50,153.87
	Add for Barricading and Night Lamps and watchman	@	0.15 %		₹ 75.23
	TOTAL				₹ 50,229.10
	Add for Sundries and contingencies	@	3.0%		₹ 1,506.87
	TOTAL				₹ 51,735.97
	Add 15% for contractor's profit and overheads	@	15%		₹ 7,760.40
	Cost for 3.66 quintal				₹ 59,496.37
	Cost per quintal				₹ 16,255.84
	Say				₹ 16,255.80
19.69	Providing and laying D.I Specials of Class K-12suitable for mechanical jointing as per IS :9523				
19.69.2	Above 600 mm dia				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing and laying D.I Specials of class K-12 for specials weighing 9.1 q.				
	Materials :-				

	Consider the weight of dia and 2 nos. 700 mm dia 90 degree double socket bends for specials above 600 mm dia.				
19169	90 degree Double socket Bends	quintal	9.10	₹ 19,600.00	₹ 178,360.00
	=2x 455 kg= 910 kg or 9.10 q.				
0407	Carriage of material	t	0.910	₹ 110.94	₹ 100.96
	Labour:				
	Labour for lowering & laying				
0216	Foreman	Day	0.150	₹ 425.00	₹ 63.75
0215	Fitter (grade-I)	Day	1.250	₹ 380.00	₹ 475.00
0212	Helper	Day	5.00	₹ 300.00	₹ 1,500.00
	TOTAL				₹ 180,499.71
	Add for Pulleys, Ropes, Crow bars ,ballies etc.	@	0.03 %		₹ 54.15
	TOTAL				₹ 180,553.86
	Add for Barricading and Night Lamps and watchman	@	0.05 %		₹ 90.28
	TOTAL				₹ 180,644.13
	Add for Sundries and contingencies	@	3.0%		₹ 5,419.32
	TOTAL				₹ 186,063.46
	Add 15% for contractor's profit and overheads	@	15%		₹ 27,909.52
	Cost for 9.10 quintal				₹ 213,972.97
	Cost per quintal				₹ 23,513.51
	Say				₹ 23,513.50
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.1	100 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19151	Cost of rubber gasket for 100 mm dia	Each	10.0	₹ 30.00	₹ 300.00
	Labour:				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0215	Fitter (grade -I)	Day	0.20	₹ 380.00	₹ 76.00
0212	Helper	Day	0.40	₹ 300.00	₹ 120.00
	TOTAL				₹ 538.50
	Add for Barricading and Night Lamps and watchman	@	2.0 %		₹ 10.77
	TOTAL				₹ 549.27
	Add for testing of joints.	@	5.0 %		₹ 27.46
	TOTAL				₹ 576.73
	Add for Sundries and contingencies	@	3.0 %		₹ 17.30
	TOTAL				₹ 594.04
	Add for water charges	@	1.0 %		₹ 5.94
	TOTAL				₹ 599.98
	Add 15% for contractor's profit and overheads	@	15%		₹ 90.00
	Cost for 10 nos. joint				₹ 689.97
	Rate per joint.				₹ 69.00
	Say				₹ 69.00
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.2	150 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				

19152	Cost of rubber gasket for 150 mm dia	Each	10.0	₹ 35.00	₹ 350.00
	Labour:				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0215	Fitter (grade -I)	Day	0.40	₹ 380.00	₹ 152.00
0212	Helper	Day	0.80	₹ 300.00	₹ 240.00
	TOTAL				₹ 827.00
	Add for Barricading and Night Lamps and watchman	@	1.75 %		₹ 14.47
	TOTAL				₹ 841.47
	Add forttesting of joints.	@	4.5 %		₹ 37.87
	TOTAL				₹ 879.34
	Add for Sundries and contingencies	@	3.0 %		₹ 26.38
	TOTAL				₹ 905.72
	Add for water charges	@	1.0 %		₹ 9.06
	TOTAL				₹ 914.78
	Add 15% for contractor's profit and overheads	@	15%		₹ 137.22
	Cost for 10 nos. joint				₹ 1,051.99
	Rate per joint.				₹ 105.20
	Say				₹ 105.20
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.3	200 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19153	Cost of rubber gasket for 200 mm dia	Each	10.0	₹ 60.00	₹ 600.00
	Labour:				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0215	Fitter (grade -I)	Day	0.55	₹ 380.00	₹ 209.00
0212	Helper	Day	1.10	₹ 300.00	₹ 330.00
	TOTAL				₹ 1,245.25
	Add for Barricading and Night Lamps and watchman	@	1.5 %		₹ 18.68
	TOTAL				₹ 1,263.93
	Add forttesting of joints.	@	4.0 %		₹ 50.56
	TOTAL				₹ 1,314.49
	Add for Sundries and contingencies	@	3.0 %		₹ 39.43
	TOTAL				₹ 1,353.92
	Add for water charges	@	1.0 %		₹ 13.54
	TOTAL				₹ 1,367.46
	Add 15% for contractor's profit and overheads	@	15%		₹ 205.12
	Cost for 10 nos. joint				₹ 1,572.58
	Rate per joint.				₹ 157.26
	Say				₹ 157.30
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.4	250 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19154	Cost of rubber gasket for 250 mm dia	Each	10.0	₹ 70.00	₹ 700.00
	Labour:				
0216	Foreman	Day	0.35	₹ 425.00	₹ 148.75
0215	Fitter (grade -I)	Day	0.70	₹ 380.00	₹ 266.00

0212	Helper	Day	1.40	₹ 300.00	₹ 420.00
	TOTAL				₹ 1,534.75
	Add for Barricading and Night Lamps and watchman	@	1.0 %		₹ 15.35
	TOTAL				₹ 1,550.10
	Add for testing of joints.	@	3.75 %		₹ 58.13
	TOTAL				₹ 1,608.23
	Add for Sundries and contingencies	@	3.0 %		₹ 48.25
	TOTAL				₹ 1,656.47
	Add for water charges	@	1.0 %		₹ 16.56
	TOTAL				₹ 1,673.04
	Add 15% for contractor's profit and overheads	@	15%		₹ 250.96
	Cost for 10 nos. joint				₹ 1,923.99
	Rate per joint.				₹ 192.40
	Say				₹ 192.40
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.5	300 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19155	Cost of rubber gasket for 300 mm dia	Each	10.0	₹ 125.00	₹ 1,250.00
	Labour:				
0216	Foreman	Day	0.35	₹ 425.00	₹ 148.75
0215	Fitter (grade -I)	Day	0.75	₹ 380.00	₹ 285.00
0212	Helper	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 2,133.75
	Add for Barricading and Night Lamps and watchman	@	1.0 %		₹ 21.34
	TOTAL				₹ 2,155.09
	Add for testing of joints.	@	3.5 %		₹ 75.43
	TOTAL				₹ 2,230.52
	Add for Sundries and contingencies	@	3.0 %		₹ 66.92
	TOTAL				₹ 2,297.43
	Add for water charges	@	1.0 %		₹ 22.97
	TOTAL				₹ 2,320.41
	Add 15% for contractor's profit and overheads	@	15%		₹ 348.06
	Cost for 10 nos. joint				₹ 2,668.47
	Rate per joint.				₹ 266.85
	Say				₹ 266.80
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.6	350 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19156	Cost of rubber gasket for 350 mm dia	Each	10.0	₹ 130.00	₹ 1,300.00
	Labour:				
0216	Foreman	Day	0.35	₹ 425.00	₹ 148.75
0215	Fitter (grade -I)	Day	0.80	₹ 380.00	₹ 304.00
0212	Helper	Day	1.60	₹ 300.00	₹ 480.00
	TOTAL				₹ 2,232.75
	Add for Barricading and Night Lamps and watchman	@	1.0 %		₹ 22.33
	TOTAL				₹ 2,255.08

	Add for testing of joints.	@	3.5 %		₹ 78.93
	TOTAL				₹ 2,334.01
	Add for Sundries and contingencies	@	3.0 %		₹ 70.02
	TOTAL				₹ 2,404.03
	Add for water charges	@	1.0 %		₹ 24.04
	TOTAL				₹ 2,428.07
	Add 15% for contractor's profit and overheads	@	15%		₹ 364.21
	Cost for 10 nos. joint				₹ 2,792.28
	Rate per joint.				₹ 279.23
	Say				₹ 279.20
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.7	400 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19157	Cost of rubber gasket for 400 mm dia	Each	10.0	₹ 250.00	₹ 2,500.00
	Labour:				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0215	Fitter (grade -I)	Day	1.15	₹ 380.00	₹ 437.00
0212	Helper	Day	2.00	₹ 300.00	₹ 600.00
	TOTAL				₹ 3,749.50
	Add for Barricading and Night Lamps and watchman	@	1.0 %		₹ 37.50
	TOTAL				₹ 3,787.00
	Add for testing of joints.	@	3.25 %		₹ 123.08
	TOTAL				₹ 3,910.07
	Add for Sundries and contingencies	@	3.0 %		₹ 117.30
	TOTAL				₹ 4,027.37
	Add for water charges	@	1.0 %		₹ 40.27
	TOTAL				₹ 4,067.65
	Add 15% for contractor's profit and overheads	@	15%		₹ 610.15
	Cost for 10 nos. joint				₹ 4,677.80
	Rate per joint.				₹ 467.78
	Say				₹ 467.80
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.8	450 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19158	Cost of rubber gasket for 450 mm dia	Each	10.0	₹ 270.00	₹ 2,700.00
	Labour:				
0216	Foreman	Day	0.55	₹ 425.00	₹ 233.75
0215	Fitter (grade -I)	Day	1.25	₹ 380.00	₹ 475.00
0212	Helper	Day	2.25	₹ 300.00	₹ 675.00
	TOTAL				₹ 4,083.75
	Add for Barricading and Night Lamps and watchman	@	0.75 %		₹ 30.63
	TOTAL				₹ 4,114.38
	Add for testing of joints.	@	3.0 %		₹ 123.43
	TOTAL				₹ 4,237.81
	Add for Sundries and contingencies	@	3.0 %		₹ 127.13
	TOTAL				₹ 4,364.94

	Add for water charges	@	1.0 %		₹ 43.65
	TOTAL				₹ 4,408.59
	Add 15% for contractor's profit and overheads	@	15%		₹ 661.29
	Cost for 10 nos. joint				₹ 5,069.88
	Rate per joint.				₹ 506.99
	Say				₹ 507.00
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.9	500 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19159	Cost of rubber gasket for 500 mm dia	Each	10.0	₹ 300.00	₹ 3,000.00
	Labour:				
0216	Foreman	Day	0.60	₹ 425.00	₹ 255.00
0215	Fitter (grade -I)	Day	1.30	₹ 380.00	₹ 494.00
0212	Helper	Day	2.40	₹ 300.00	₹ 720.00
	TOTAL				₹ 4,469.00
	Add for Barricading and Night Lamps and watchman	@	0.75 %		₹ 33.52
	TOTAL				₹ 4,502.52
	Add for testing of joints.	@	3.0 %		₹ 135.08
	TOTAL				₹ 4,637.59
	Add for Sundries and contingencies	@	3.0 %		₹ 139.13
	TOTAL				₹ 4,776.72
	Add for water charges	@	1.0 %		₹ 47.77
	TOTAL				₹ 4,824.49
	Add 15% for contractor's profit and overheads	@	15%		₹ 723.67
	Cost for 10 nos. joint				₹ 5,548.16
	Rate per joint.				₹ 554.82
	Say				₹ 554.80
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.10	600 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19160	Cost of rubber gasket for 600 mm dia	Each	10.0	₹ 375.00	₹ 3,750.00
	Labour:				
0216	Foreman	Day	0.75	₹ 425.00	₹ 318.75
0215	Fitter (grade -I)	Day	1.80	₹ 380.00	₹ 684.00
0212	Helper	Day	3.30	₹ 300.00	₹ 990.00
	TOTAL				₹ 5,742.75
	Add for Barricading and Night Lamps and watchman	@	0.75 %		₹ 43.07
	TOTAL				₹ 5,785.82
	Add for testing of joints.	@	2.50 %		₹ 144.65
	TOTAL				₹ 5,930.47
	Add for Sundries and contingencies	@	3.0 %		₹ 177.91
	TOTAL				₹ 6,108.38
	Add for water charges	@	1.0 %		₹ 61.08
	TOTAL				₹ 6,169.46
	Add 15% for contractor's profit and overheads	@	15%		₹ 925.42
	Cost for 10 nos. joint				₹ 7,094.88

	Rate per joint.				₹ 709.49
	Say				₹ 709.50
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.11	650 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19161	Cost of rubber gasket for 650 mm dia	Each	10.0	₹ 575.00	₹ 5,750.00
	Labour:				
0216	Foreman	Day	0.80	₹ 425.00	₹ 340.00
0215	Fitter (grade -I)	Day	2.00	₹ 380.00	₹ 760.00
0212	Helper	Day	4.00	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 8,050.00
	Add for Barricading and Night Lamps and watchman	@	0.5 %		₹ 40.25
	TOTAL				₹ 8,090.25
	Add for testing of joints.	@	2.15 %		₹ 173.94
	TOTAL				₹ 8,264.19
	Add for Sundries and contingencies	@	3.0 %		₹ 247.93
	TOTAL				₹ 8,512.12
	Add for water charges	@	1.0 %		₹ 85.12
	TOTAL				₹ 8,597.24
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,289.59
	Cost for 10 nos. joint				₹ 9,886.82
	Rate per joint.				₹ 988.68
	Say				₹ 988.70
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.12	700 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19162	Cost of rubber gasket for 700 mm dia	Each	10.0	₹ 700.00	₹ 7,000.00
	Labour:				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0215	Fitter (grade -I)	Day	2.15	₹ 380.00	₹ 817.00
0212	Helper	Day	4.30	₹ 300.00	₹ 1,290.00
	TOTAL				₹ 9,532.00
	Add for Barricading and Night Lamps and watchman	@	0.5 %		₹ 47.66
	TOTAL				₹ 9,579.66
	Add for testing of joints.	@	2.0 %		₹ 191.59
	TOTAL				₹ 9,771.25
	Add for Sundries and contingencies	@	3.0 %		₹ 293.14
	TOTAL				₹ 10,064.39
	Add for water charges	@	1.0 %		₹ 100.64
	TOTAL				₹ 10,165.03
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,524.76
	Cost for 10 nos. joint				₹ 11,689.79
	Rate per joint.				₹ 1,168.98
	Say				₹ 1,169.00

19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.13	800 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19163	Cost of rubber gasket for 800 mm dia	Each	10.0	₹ 750.00	₹ 7,500.00
	Labour:				
0216	Foreman	Day	1.10	₹ 425.00	₹ 467.50
0215	Fitter (grade -I)	Day	2.25	₹ 380.00	₹ 855.00
0212	Helper	Day	4.40	₹ 300.00	₹ 1,320.00
	TOTAL				₹ 10,142.50
	Add for Barricading and Night Lamps and watchman	@	0.5 %		₹ 50.71
	TOTAL				₹ 10,193.21
	Add for testing of joints.	@	1.75 %		₹ 178.38
	TOTAL				₹ 10,371.59
	Add for Sundries and contingencies	@	3.0 %		₹ 311.15
	TOTAL				₹ 10,682.74
	Add for water charges	@	1.0 %		₹ 106.83
	TOTAL				₹ 10,789.57
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,618.44
	Cost for 10 nos. joint				₹ 12,408.00
	Rate per joint.				₹ 1,240.80
	Say				₹ 1,240.80
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.14	900 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 Joints				
	Materials :-				
19164	Cost of rubber gasket for 900 mm dia	Each	10.0	₹ 990.00	₹ 9,900.00
	Labour:				
0216	Foreman	Day	1.20	₹ 425.00	₹ 510.00
0215	Fitter (grade -I)	Day	2.50	₹ 380.00	₹ 950.00
0212	Helper	Day	5.30	₹ 300.00	₹ 1,590.00
	TOTAL				₹ 12,950.00
	Add for Barricading and Night Lamps and watchman	@	0.3 %		₹ 38.85
	TOTAL				₹ 12,988.85
	Add for testing of joints.	@	1.5 %		₹ 194.83
	TOTAL				₹ 13,183.68
	Add for Sundries and contingencies	@	3.0 %		₹ 395.51
	TOTAL				₹ 13,579.19
	Add for water charges	@	1.0 %		₹ 135.79
	TOTAL				₹ 13,714.99
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,057.25
	Cost for 10 nos. joint				₹ 15,772.23
	Rate per joint.				₹ 1,577.22
	Say				₹ 1,577.20
19.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:				
19.70.15	1000 mm dia pipes				
Code	Description	Unit	Quantity	Rate	Amount

	Details of cost for 10 Joints				
	Materials :-				
19165	Cost of rubber gasket for 1000 mm dia	Each	10.0	₹ 1,180.00	₹ 11,800.00
	Labour:				
0216	Foreman	Day	1.30	₹ 425.00	₹ 552.50
0215	Fitter (grade -I)	Day	2.80	₹ 380.00	₹ 1,064.00
0212	Helper	Day	5.80	₹ 300.00	₹ 1,740.00
	TOTAL				₹ 15,156.50
	Add for Barricading and Night Lamps and watchman	@	0.25 %		₹ 37.89
	TOTAL				₹ 15,194.39
	Add for testing of joints.	@	1.25 %		₹ 189.93
	TOTAL				₹ 15,384.32
	Add for Sundries and contingencies	@	3.0 %		₹ 461.53
	TOTAL				₹ 15,845.85
	Add for water charges	@	1.0 %		₹ 158.46
	TOTAL				₹ 16,004.31
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,400.65
	Cost for 10 nos. joint				₹ 18,404.96
	Rate per joint.				₹ 1,840.50
	Say				₹ 1,840.50
19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.1	100 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	100 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 27.00 kg				
	Weight of 5 m pipes 27.00x5 = 135.00 Kg				
19196	Cost of pipe	metre	5.00	₹ 1,380.00	₹ 6,900.00
0456	Carriage of pipes	100 metre	5.00	₹ 272.80	₹ 13.64
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	1.35	₹ 130.45	₹ 176.10
	SH : Water Supply				
	TOTAL				₹ 7,089.74
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 207.41
	TOTAL				₹ 7,297.15
	Add for water charges	@	1.0 %		₹ 72.97
	TOTAL				₹ 7,370.12
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 1,079.10
	Cost for 5 mtr.				₹ 8,449.23
	Rate per mtr.				₹ 1,689.85
	Say				₹ 1,689.80
19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.2	150 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	150 mm dia. cast iron pipes double flanged				
	weight of 1m pipe = 44.10 kg				
	Weight of 5 m pipes: 44.10 x 5 = 220.50 Kg=2.21q				
19197	Cost of pipe	metre	5.00	₹ 2,150.00	₹ 10,750.00
0458	Carriage of pipes	100 metre	5.00	₹ 454.67	₹ 22.73
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	2.21	₹ 130.45	₹ 288.29

SH : Water Supply					
	TOTAL				₹ 11,061.02
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 323.18
	TOTAL				₹ 11,384.20
	Add for water charges	@	1.0 %		₹ 113.84
	TOTAL				₹ 11,498.05
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 1,681.46
	Cost for 5 mtr.				₹ 13,179.51
	Rate per mtr.				₹ 2,635.90
	Say				₹ 2,635.90
19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.3	200 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	200 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 63.50 kg				
	Weight of 5 m pipes: 63.50 x 5 = 317.50 Kg=3.18 q				
19198	Cost of pipe	metre	5.00	₹ 3,350.00	₹ 16,750.00
0459	Carriage of pipes	100 metre	5.00	₹ 737.30	₹ 36.87
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	3.18	₹ 130.45	₹ 414.82
	SH : Water Supply				
	TOTAL				₹ 17,201.69
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 503.61
	TOTAL				₹ 17,705.29
	Add for water charges	@	1.0 %		₹ 177.05
	TOTAL				₹ 17,882.35
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 2,620.13
	Cost for 5 mtr.				₹ 20,502.47
	Rate per mtr.				₹ 4,100.49
	Say				₹ 4,100.50
19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.4	250 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	250 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 85.30 kg				
	Weight of 5 m pipes: 85.30 x 5 = 426.50 Kg= 4.27 q				
19199	Cost of pipe	metre	5.00	₹ 4,000.00	₹ 20,000.00
0460	Carriage of pipes	100 metre	5.00	₹ 1,049.23	₹ 52.46
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	4.27	₹ 130.45	₹ 557.01
	SH : Water Supply				
	TOTAL				₹ 20,609.47
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 601.57
	TOTAL				₹ 21,211.04
	Add for water charges	@	1.0 %		₹ 212.11
	TOTAL				₹ 21,423.15
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 3,129.92
	Cost for 5 mtr.				₹ 24,553.08
	Rate per mtr.				₹ 4,910.62
	Say				₹ 4,910.60

19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.5	300 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	300 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 110 kg				
	Weight of 5 m pipes: 110.00 x 5 = 550.00 Kg= 5.50 q				
19200	Cost of pipe	metre	5.00	₹ 5,120.00	₹ 25,600.00
0461	Carriage of pipes	100 metre	5.00	₹ 1,299.05	₹ 64.95
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	5.5	₹ 130.45	₹ 717.46
	SH : Water Supply				
	TOTAL				₹ 26,382.41
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 769.95
	TOTAL				₹ 27,152.36
	Add for water charges	@	1.0 %		₹ 271.52
	TOTAL				₹ 27,423.88
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 4,005.96
	Cost for 5 mtr.				₹ 31,429.85
	Rate per mtr.				₹ 6,285.97
	Say				₹ 6,286.00
19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.6	350 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	350 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 135.70 kg				
	Weight of 5 m pipes: 135.70 x 5 = 678.50 Kg= 6.79 q				
19201	Cost of pipe	metre	5.00	₹ 6,460.00	₹ 32,300.00
0462	Carriage of pipes	100 metre	5.00	₹ 1,818.67	₹ 90.93
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	6.79	₹ 130.45	₹ 885.74
	SH : Water Supply				
	TOTAL				₹ 33,276.67
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 971.73
	TOTAL				₹ 34,248.40
	Add for water charges	@	1.0 %		₹ 342.48
	TOTAL				₹ 34,590.88
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 5,055.77
	Cost for 5 mtr.				₹ 39,646.65
	Rate per mtr.				₹ 7,929.33
	Say				₹ 7,929.30
19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.7	400 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	400 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 166.80 kg				
	Weight of 5 m pipes: 166.80 x 5 =834.00 Kg= 8.34 q				
19202	Cost of pipe	metre	5.00	₹ 8,380.00	₹ 41,900.00
0463	Carriage of pipes	100 metre	5.00	₹ 2,480.01	₹ 124.00
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	8.34	₹ 130.45	₹ 1,087.93
	SH : Water Supply				

	TOTAL				₹ 43,111.93
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 1,260.72
	TOTAL				₹ 44,372.65
	Add for water charges	@	1.0 %		₹ 443.73
	TOTAL				₹ 44,816.38
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 6,559.27
	Cost for 5 mtr.				₹ 51,375.64
	Rate per mtr.				₹ 10,275.13
	Say				₹ 10,275.10
19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.8	450 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	450 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 201.60 kg				
	Weight of 5 m pipes: 201.60 x 5 =1008.00 Kg= 10.08 q				
19203	Cost of pipe	metre	5.00	₹ 10,700.00	₹ 53,500.00
0464	Carriage of pipes	100 metre	5.00	₹ 3,031.11	₹ 151.56
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	10.08	₹ 130.45	₹ 1,314.91
	SH : Water Supply				
	TOTAL				₹ 54,966.46
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 1,609.55
	TOTAL				₹ 56,576.01
	Add for water charges	@	1.0 %		₹ 565.76
	TOTAL				₹ 57,141.77
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 8,374.03
	Cost for 5 mtr.				₹ 65,515.80
	Rate per mtr.				₹ 13,103.16
	Say				₹ 13,103.20
19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.9	500 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	500 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 234.80 kg				
	Weight of 5 m pipes: 234.80 x 5 =1174.00 Kg= 11.74 q				
19204	Cost of pipe	metre	5.00	₹ 13,500.00	₹ 67,500.00
0465	Carriage of pipes	100 metre	5.00	₹ 3,011.11	₹ 150.56
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	11.74	₹ 130.45	₹ 1,531.45
	SH : Water Supply				
	TOTAL				₹ 69,182.00
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 2,029.52
	TOTAL				₹ 71,211.52
	Add for water charges	@	1.0 %		₹ 712.12
	TOTAL				₹ 71,923.64
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 10,558.83
	Cost for 5 mtr.				₹ 82,482.46
	Rate per mtr.				₹ 16,496.49
	Say				₹ 16,496.50

19.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):				
19.71.10	600 mm dia C.I. Double Flanged Pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	600 mm dia. cast iron pipes double flanged				
	weight of 1 m pipe = 315.30 kg				
	Weight of 5 m pipes: 315.30 x 5 =1576.50 Kg= 15.77 q				
19205	Cost of pipe	metre	5.00	₹ 18,400.00	₹ 92,000.00
0466	Carriage of pipes	100 metre	5.00	₹ 4,546.68	₹ 227.33
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	15.77	₹ 130.45	₹ 2,057.15
	SH : Water Supply				
	TOTAL				₹ 94,284.48
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 2,766.82
	TOTAL				₹ 97,051.30
	Add for water charges	@	1.0 %		₹ 970.51
	TOTAL				₹ 98,021.82
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 14,394.70
	Cost for 5 mtr.				₹ 112,416.52
	Rate per mtr.				₹ 22,483.30
	Say				₹ 22,483.30
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.1	100 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
	100 mm dia D.I Pipes= 17.76 kg/mtr.=22.00x 17.76=390.72 kg= say,3.91q				
19206	19.33.1	metre	22.00	₹ 800.00	₹ 17,600.00
0423	Carriage of pipes	100 metre	22.00	₹ 272.80	₹ 60.02
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0215	Fitter (grade -I)	Day	0.50	₹ 380.00	₹ 190.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 18,192.52
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.25 %		₹ 45.48
	TOTAL				₹ 18,238.00
	Add for Barricading, Night Lamps and watchman etc.	@	0.20 %		₹ 36.48
	TOTAL				₹ 18,274.47
	Add for Sundries and contingencies	@	3.0 %		₹ 548.23
	TOTAL				₹ 18,822.71
	Add for water charges	@	1.0 %		₹ 188.23
	TOTAL				₹ 19,010.93
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,851.64
	Cost for 22.00 mtr/3.91 q.				₹ 21,862.57
	Rate per mtr.				₹ 993.75
	Say				₹ 993.80
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.2	150 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				

Materials :-					
150 mm dia D.I Pipes=26.27 kg/mtr.=22.00x 26.27=578 kg= say,5.78 q					
19207	Cost of pipe	metre	22.00	₹ 1,170.00	₹ 25,740.00
0409	Carriage of pipes	100 metre	22.00	₹ 454.67	₹ 100.03
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0215	Fitter (grade -I)	Day	0.60	₹ 380.00	₹ 228.00
0212	Helper	Day	1.70	₹ 300.00	₹ 510.00
	TOTAL				₹ 26,663.03
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.20 %		₹ 53.33
	TOTAL				₹ 26,716.35
	Add for Barricading, Night Lamps and watchman etc.	@	0.15 %		₹ 40.07
	TOTAL				₹ 26,756.43
	Add for Sundries and contingencies	@	3.0 %		₹ 802.69
	TOTAL				₹ 27,559.12
	Add for water charges	@	1.0 %		₹ 275.59
	TOTAL				₹ 27,834.71
	Add 15% for contractor's profit and overheads	@	15%		₹ 4,175.21
	Cost for 22.00 mtr/ 5.78 q.				₹ 32,009.92
	Rate per mtr.				₹ 1,455.00
	Say				₹ 1,455.00
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.3	200 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
200 mm dia D.I Pipes=36.15 kg/mtr.=22.00x 36.15=795 kg= say, 7.95 q					
19208	Cost of pipe	metre	22.00	₹ 1,660.00	₹ 36,520.00
0410	Carriage of pipes	100 metre	22.00	₹ 737.30	₹ 162.21
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0215	Fitter (grade -I)	Day	0.75	₹ 380.00	₹ 285.00
0212	Helper	Day	2.35	₹ 300.00	₹ 705.00
	TOTAL				₹ 37,778.46
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.15 %		₹ 56.67
	TOTAL				₹ 37,835.12
	Add for Barricading, Night Lamps and watchman etc.	@	0.12 %		₹ 45.40
	TOTAL				₹ 37,880.53
	Add for Sundries and contingencies	@	3.0 %		₹ 1,136.42
	TOTAL				₹ 39,016.94
	Add for water charges	@	1.0 %		₹ 390.17
	TOTAL				₹ 39,407.11
	Add 15% for contractor's profit and overheads	@	15%		₹ 5,911.07
	Cost for 22.00 mtr/7.95 q.				₹ 45,318.18
	Rate per mtr.				₹ 2,059.92
	Say				₹ 2,059.90
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.4	250 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount

Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
250 mm dia D.I Pipes=48.00 kg/mtr.=22.00x 48.00=1050kg= say, 10.5 q					
19209	Cost of pipe	metre	22.00	₹ 2,250.00	₹ 49,500.00
0411	Carriage of pipes	100 metre	22.00	₹ 1,049.23	₹ 230.83
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.35	₹ 425.00	₹ 148.75
0215	Fitter (grade -I)	Day	1.10	₹ 380.00	₹ 418.00
0212	Helper	Day	3.00	₹ 300.00	₹ 900.00
	TOTAL				₹ 51,197.58
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.12 %		₹ 61.44
	TOTAL				₹ 51,259.02
	Add for Barricading, Night Lamps and watchman etc.	@	0.10 %		₹ 51.26
	TOTAL				₹ 51,310.28
	Add for Sundries and contingencies	@	3.0 %		₹ 1,539.31
	TOTAL				₹ 52,849.59
	Add for water charges	@	1.0 %		₹ 528.50
	TOTAL				₹ 53,378.08
	Add 15% for contractor's profit and overheads	@	15%		₹ 8,006.71
	Cost for 22.00 mtr/10.50 q.				₹ 61,384.79
	Rate per mtr.				₹ 2,790.22
	Say				₹ 2,790.20
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.5	300 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
300 mm dia D.I Pipes=60.49 kg/mtr.=22.00x 60.49=1331 kg= say, 13.31 q					
19210	Cost of pipe	metre	22.00	₹ 3,150.00	₹ 69,300.00
0412	Carriage of pipes	100 metre	22.00	₹ 1,299.05	₹ 285.79
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.40	₹ 425.00	₹ 170.00
0215	Fitter (grade -I)	Day	1.35	₹ 380.00	₹ 513.00
0212	Helper	Day	4.00	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 71,468.79
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.10 %		₹ 71.47
	TOTAL				₹ 71,540.26
	Add for Barricading, Night Lamps and watchman etc.	@	0.08 %		₹ 57.23
	TOTAL				₹ 71,597.49
	Add for Sundries and contingencies	@	3.0 %		₹ 2,147.92
	TOTAL				₹ 73,745.42
	Add for water charges	@	1.0 %		₹ 737.45
	TOTAL				₹ 74,482.87
	Add 15% for contractor's profit and overheads	@	15%		₹ 11,172.43
	Cost for 22.00 mtr/ 13.31 q.				₹ 85,655.30
	Rate per mtr.				₹ 3,893.42
	Say				₹ 3,893.40
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.6	350 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount

Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
350 mm dia D.I Pipes=79.73 kg/mtr.=22.00x 79.73=1754 kg= say, 17.54 q					
19211	Cost of pipe	metre	22.00	₹ 3,650.00	₹ 80,300.00
0462	Carriage of pipes	100 metre	22.00	₹ 1,818.67	₹ 400.11
Labour:					
For lowering & laying					
0216	Foreman	Day	0.40	₹ 425.00	₹ 170.00
0215	Fitter (grade -I)	Day	1.60	₹ 380.00	₹ 608.00
0212	Helper	Day	5.25	₹ 300.00	₹ 1,575.00
TOTAL					₹ 83,053.11
Add for Ropes, Pulleys, Crow bars & ballies etc.		@	0.10 %		₹ 83.05
TOTAL					₹ 83,136.16
Add for Barricading, Night Lamps and watchman etc.		@	0.07 %		₹ 58.20
TOTAL					₹ 83,194.36
Add for Sundries and contingencies		@	3.0 %		₹ 2,495.83
TOTAL					₹ 85,690.19
Add for water charges		@	1.0 %		₹ 856.90
TOTAL					₹ 86,547.09
Add 15% for contractor's profit and overheads		@	15%		₹ 12,982.06
Cost for 22.00 mtr/ 17.54 q.					₹ 99,529.15
Rate per mtr.					₹ 4,524.05
Say					₹ 4,524.10
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.7	400 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
400 mm dia D.I Pipes=94.80 kg/mtr.=22.00x 94.80=2086 kg= say, 20.86 q					
19212	Cost of pipe	metre	22.00	₹ 4,350.00	₹ 95,700.00
0463	Carriage of pipes	100 metre	22.00	₹ 2,480.01	₹ 545.60
Labour:					
For lowering & laying					
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0215	Fitter (grade -I)	Day	2.00	₹ 380.00	₹ 760.00
0212	Helper	Day	6.00	₹ 300.00	₹ 1,800.00
TOTAL					₹ 99,018.10
Add for Ropes, Pulleys, Crow bars & ballies etc.		@	0.09 %		₹ 89.12
TOTAL					₹ 99,107.22
Add for Barricading, Night Lamps and watchman etc.		@	0.065 %		₹ 64.42
TOTAL					₹ 99,171.64
Add for Sundries and contingencies		@	3.0 %		₹ 2,975.15
TOTAL					₹ 102,146.79
Add for water charges		@	1.0 %		₹ 1,021.47
TOTAL					₹ 103,168.26
Add 15% for contractor's profit and overheads		@	15%		₹ 15,475.24
Cost for 22.00 mtr/ 20.86 q.					₹ 118,643.49
Rate per mtr.					₹ 5,392.89
Say					₹ 5,392.90
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.8	450 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount

Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
450 mm dia D.I Pipes=110.97kg/mtr.=22.00x 110.97=2441 kg= say, 24.41 q					
19213	Cost of pipe	metre	22.00	₹ 5,150.00	₹ 113,300.00
0464	Carriage of pipes	100 metre	22.00	₹ 3,031.11	₹ 666.84
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.65	₹ 425.00	₹ 276.25
0215	Fitter (grade -I)	Day	2.50	₹ 380.00	₹ 950.00
0212	Helper	Day	7.00	₹ 300.00	₹ 2,100.00
	TOTAL				₹ 117,293.09
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.085 %		₹ 99.70
	TOTAL				₹ 117,392.79
	Add for Barricading, Night Lamps and watchman etc.	@	0.06 %		₹ 70.44
	TOTAL				₹ 117,463.23
	Add for Sundries and contingencies	@	3.0 %		₹ 3,523.90
	TOTAL				₹ 120,987.13
	Add for water charges	@	1.0 %		₹ 1,209.87
	TOTAL				₹ 122,197.00
	Add 15% for contractor's profit and overheads	@	15%		₹ 18,329.55
	Cost for 22.00 mtr/ 24.41 q.				₹ 140,526.55
	Rate per mtr.				₹ 6,387.57
	Say				₹ 6,387.60
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.9	500 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
500 mm dia D.I Pipes=129.48 kg/mtr.=22.00x 129.48=2849 kg= say, 28.49 q					
19214	Cost of pipe	metre	22.00	₹ 6,150.00	₹ 135,300.00
0465	Carriage of pipes	100 metre	22.00	₹ 3,011.11	₹ 662.44
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.85	₹ 425.00	₹ 361.25
0215	Fitter (grade -I)	Day	3.00	₹ 380.00	₹ 1,140.00
0212	Helper	Day	8.00	₹ 300.00	₹ 2,400.00
	TOTAL				₹ 139,863.69
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.075 %		₹ 104.90
	TOTAL				₹ 139,968.59
	Add for Barricading, Night Lamps and watchman etc.	@	0.05 %		₹ 69.98
	TOTAL				₹ 140,038.58
	Add for Sundries and contingencies	@	3.0 %		₹ 4,201.16
	TOTAL				₹ 144,239.73
	Add for water charges	@	1.0 %		₹ 1,442.40
	TOTAL				₹ 145,682.13
	Add 15% for contractor's profit and overheads	@	15%		₹ 21,852.32
	Cost for 22.00 mtr/ 28.49 q.				₹ 167,534.45
	Rate per mtr.				₹ 7,615.20
	Say				₹ 7,615.20

19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.10	600 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
	600 mm dia D.I Pipes=168.68 kg/mtr.=22.00x 168.68=3710 kg= say, 37.10 q				
19215	Cost of pipe	metre	22.00	₹ 8,110.00	₹ 178,420.00
0466	Carriage of pipes	100 metre	22.00	₹ 4,546.68	₹ 1,000.27
	Labour:				
	For lowering & laying				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0215	Fitter (grade -I)	Day	3.50	₹ 380.00	₹ 1,330.00
0212	Helper	Day	11.00	₹ 300.00	₹ 3,300.00
	TOTAL				₹ 184,475.27
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.06 %		₹ 110.69
	TOTAL				₹ 184,585.95
	Add for Barricading, Night Lamps and watchman etc.	@	0.04 %		₹ 73.83
	TOTAL				₹ 184,659.79
	Add for Sundries and contingencies	@	3.0 %		₹ 5,539.79
	TOTAL				₹ 190,199.58
	Add for water charges	@	1.0 %		₹ 1,902.00
	TOTAL				₹ 192,101.58
	Add 15% for contractor's profit and overheads	@	15%		₹ 28,815.24
	Cost for 22.00 mtr/ 37.10 q.				₹ 220,916.82
	Rate per mtr.				₹ 10,041.67
	Say				₹ 10,041.70
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.11	700 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
	700 mm dia D.I Pipes=217.54 kg/mtr.=22.00x 217.54=4786 kg= say, 47.86 q				
19216	Cost of pipe	metre	22.00	₹ 10,050.00	₹ 221,100.00
0418	Carriage of pipes	100 metre	22.00	₹ 4,546.68	₹ 1,000.27
	Labour:				
	For lowering & laying				
0216	Foreman	Day	1.20	₹ 425.00	₹ 510.00
0215	Fitter (grade -I)	Day	4.00	₹ 380.00	₹ 1,520.00
0212	Helper	Day	14.50	₹ 300.00	₹ 4,350.00
	TOTAL				₹ 228,480.27
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.05 %		₹ 114.24
	TOTAL				₹ 228,594.51
	Add for Barricading, Night Lamps and watchman etc.	@	0.03 %		₹ 68.58
	TOTAL				₹ 228,663.09
	Add for Sundries and contingencies	@	3.0 %		₹ 6,859.89
	TOTAL				₹ 235,522.98
	Add for water charges	@	1.0 %		₹ 2,355.23
	TOTAL				₹ 237,878.21
	Add 15% for contractor's profit and overheads	@	15%		₹ 35,681.73
	Cost for 22.00 mtr/ 47.86 q.				₹ 273,559.94
	Rate per mtr.				₹ 12,434.54
	Say				₹ 12,434.50
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				

19.72.12	800 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
	800 mm dia D.I Pipes=267.10 kg/mtr.=22.00x 267.10=5876 kg= say, 58.76 q				
19217	Cost of pipe	metre	22.00	₹ 14,000.00	₹ 308,000.00
0419	Carriage of pipes	100 metre	22.00	₹ 4,546.68	₹ 1,000.27
	Labour:				
	For lowering & laying				
0216	Foreman	Day	1.50	₹ 425.00	₹ 637.50
0215	Fitter (grade -I)	Day	5.50	₹ 380.00	₹ 2,090.00
0212	Helper	Day	17.00	₹ 300.00	₹ 5,100.00
	TOTAL				₹ 316,827.77
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.04 %		₹ 126.73
	TOTAL				₹ 316,954.50
	Add for Barricading, Night Lamps and watchman etc.	@	0.025 %		₹ 79.24
	TOTAL				₹ 317,033.74
	Add for Sundries and contingencies	@	3.0 %		₹ 9,511.01
	TOTAL				₹ 326,544.75
	Add for water charges	@	1.0 %		₹ 3,265.45
	TOTAL				₹ 329,810.20
	Add 15% for contractor's profit and overheads	@	15%		₹ 49,471.53
	Cost for 22.00 mtr/ 58.76 q.				₹ 379,281.73
	Rate per mtr.				₹ 17,240.08
	Say				₹ 17,240.10
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.13	900 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
	900 mm dia D.I Pipes=321.29 kg/mtr.=22.00x 321.29=7068 kg= say, 70.68 q				
19218	Cost of pipe	metre	22.00	₹ 17,250.00	₹ 379,500.00
0420	Carriage of pipes	100 metre	22.00	₹ 6,820.02	₹ 1,500.40
	Labour:				
	For lowering & laying				
0216	Foreman	Day	1.75	₹ 425.00	₹ 743.75
0215	Fitter (grade -I)	Day	6.00	₹ 380.00	₹ 2,280.00
0212	Helper	Day	21.50	₹ 300.00	₹ 6,450.00
	TOTAL				₹ 390,474.15
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.03 %		₹ 117.14
	TOTAL				₹ 390,591.30
	Add for Barricading, Night Lamps and watchman etc.	@	0.015 %		₹ 58.59
	TOTAL				₹ 390,649.89
	Add for Sundries and contingencies	@	3.0 %		₹ 11,719.50
	TOTAL				₹ 402,369.38
	Add for water charges	@	1.0 %		₹ 4,023.69
	TOTAL				₹ 406,393.08
	Add 15% for contractor's profit and overheads	@	15%		₹ 60,958.96
	Cost for 22.00 mtr/ 70.68 q.				₹ 467,352.04
	Rate per mtr.				₹ 21,243.27
	Say				₹ 21,243.30
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				

19.72.14	1000 mm dia Ductile Iron Class K-7 pipes				
Code	Description	Unit	Quantity	Rate	Amount
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
	1000 mm dia D.I Pipes=380.19 kg/mtr.=22.00x 380.19=8364 kg= say, 83.64 q				
19219	Cost of pipe	metre	22.00	₹ 20,950.00	₹ 460,900.00
0408	Carriage of pipes	100 metre	22.00	₹ 9,093.35	₹ 2,000.54
	Labour:				
	For lowering & laying				
0216	Foreman	Day	2.00	₹ 425.00	₹ 850.00
0215	Fitter (grade -I)	Day	7.00	₹ 380.00	₹ 2,660.00
0212	Helper	Day	25.00	₹ 300.00	₹ 7,500.00
	TOTAL				₹ 473,910.54
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.02 %		₹ 94.78
	TOTAL				₹ 474,005.32
	Add for Barricading, Night Lamps and watchman etc.	@	0.01%		₹ 47.40
	TOTAL				₹ 474,052.72
	Add for Sundries and contingencies	@	3.0 %		₹ 14,221.58
	TOTAL				₹ 488,274.30
	Add for water charges	@	1.0 %		₹ 4,882.74
	TOTAL				₹ 493,157.04
	Add 15% for contractor's profit and overheads	@	15%		₹ 73,973.56
	Cost for 22.00 mtr/ 83.64 q.				₹ 567,130.60
	Rate per mtr.				₹ 25,778.66
	Say				₹ 25,778.70
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.15	100 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19136	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 100 mm dia	metre	22.00	₹ 880.00	₹ 19,360.00
0456	Carriage of pipes	100 metre	22.00	₹ 272.80	₹ 60.02
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.10	₹ 425.00	₹ 42.50
0215	Fitter (grade -I)	Day	0.50	₹ 380.00	₹ 190.00
0212	Helper	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 19,952.52
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.25 %		₹ 49.88
	TOTAL				₹ 20,002.40
	Add for Barricading, Night Lamps and watchman etc.	@	0.20 %		₹ 40.00
	TOTAL				₹ 20,042.40
	Add for Sundries and contingencies	@	3.0 %		₹ 601.27
	TOTAL				₹ 20,643.67
	Add for water charges	@	1.0 %		₹ 206.44
	TOTAL				₹ 20,850.11
	Add 15% for contractor's profit and overheads	@	15%		₹ 3,127.52
	Cost for 22.00 mtr				₹ 23,977.63
	Rate per mtr.				₹ 1,089.89
	Say				₹ 1,089.90
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				

19.72.16	150 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19137	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 150 mm dia	metre	22.00	₹ 1,300.00	₹ 28,600.00
0458	Carriage of pipes	100 metre	22.00	₹ 454.67	₹ 100.03
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.20	₹ 425.00	₹ 85.00
0215	Fitter (grade -I)	Day	0.60	₹ 380.00	₹ 228.00
0212	Helper	Day	1.70	₹ 300.00	₹ 510.00
	TOTAL				₹ 29,523.03
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.20 %		₹ 59.05
	TOTAL				₹ 29,582.07
	Add for Barricading, Night Lamps and watchman etc.	@	0.15 %		₹ 44.37
	TOTAL				₹ 29,626.45
	Add for Sundries and contingencies	@	3.0 %		₹ 888.79
	TOTAL				₹ 30,515.24
	Add for water charges	@	1.0 %		₹ 305.15
	TOTAL				₹ 30,820.39
	Add 15% for contractor's profit and overheads	@	15%		₹ 4,623.06
	Cost for 22.00 mtr				₹ 35,443.45
	Rate per mtr.				₹ 1,611.07
	Say				₹ 1,611.10
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.17	200 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19138	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 200 mm dia	metre	22.00	₹ 1,800.00	₹ 39,600.00
0459	Carriage of pipes	100 metre	22.00	₹ 737.30	₹ 162.21
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.25	₹ 425.00	₹ 106.25
0215	Fitter (grade -I)	Day	0.75	₹ 380.00	₹ 285.00
0212	Helper	Day	2.35	₹ 300.00	₹ 705.00
	TOTAL				₹ 40,858.46
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.15 %		₹ 61.29
	TOTAL				₹ 40,919.74
	Add for Barricading, Night Lamps and watchman etc.	@	0.12 %		₹ 49.10
	TOTAL				₹ 40,968.85
	Add for Sundries and contingencies	@	3.0 %		₹ 1,229.07
	TOTAL				₹ 42,197.91
	Add for water charges	@	1.0 %		₹ 421.98
	TOTAL				₹ 42,619.89
	Add 15% for contractor's profit and overheads	@	15%		₹ 6,392.98
	Cost for 22.00 mtr				₹ 49,012.88
	Rate per mtr.				₹ 2,227.86
	Say				₹ 2,227.90
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				

19.72.18	250 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19139	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 250 mm dia	metre	22.00	₹ 2,300.00	₹ 50,600.00
0460	Carriage of pipes	100 metre	22.00	₹ 1,049.23	₹ 230.83
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.35	₹ 425.00	₹ 148.75
0215	Fitter (grade -I)	Day	1.10	₹ 380.00	₹ 418.00
0212	Helper	Day	3.00	₹ 300.00	₹ 900.00
	TOTAL				₹ 52,297.58
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.12 %		₹ 62.76
	TOTAL				₹ 52,360.34
	Add for Barricading, Night Lamps and watchman etc.	@	0.10 %		₹ 52.36
	TOTAL				₹ 52,412.70
	Add for Sundries and contingencies	@	3.0 %		₹ 1,572.38
	TOTAL				₹ 53,985.08
	Add for water charges	@	1.0 %		₹ 539.85
	TOTAL				₹ 54,524.93
	Add 15% for contractor's profit and overheads	@	15%		₹ 8,178.74
	Cost for 22.00 mtr				₹ 62,703.67
	Rate per mtr.				₹ 2,850.17
	Say				₹ 2,850.20
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.19	300 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19140	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 300 mm dia	metre	22.00	₹ 2,950.00	₹ 64,900.00
0461	Carriage of pipes	100 metre	22.00	₹ 1,299.05	₹ 285.79
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.40	₹ 425.00	₹ 170.00
0215	Fitter (grade -I)	Day	1.35	₹ 380.00	₹ 513.00
0212	Helper	Day	4.00	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 67,068.79
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.10 %		₹ 67.07
	TOTAL				₹ 67,135.86
	Add for Barricading, Night Lamps and watchman etc.	@	0.08 %		₹ 53.71
	TOTAL				₹ 67,189.57
	Add for Sundries and contingencies	@	3.0 %		₹ 2,015.69
	TOTAL				₹ 69,205.26
	Add for water charges	@	1.0 %		₹ 692.05
	TOTAL				₹ 69,897.31
	Add 15% for contractor's profit and overheads	@	15%		₹ 10,484.60
	Cost for 22.00 mtr				₹ 80,381.90
	Rate per mtr.				₹ 3,653.72
	Say				₹ 3,653.70
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.20	350 mm dia Ductile Iron Class K-9 pipes				

Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
19141	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 350 mm dia	metre	22.00	₹ 3,450.00	₹ 75,900.00
0462	Carriage of pipes	100 metre	22.00	₹ 1,818.67	₹ 400.11
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.40	₹ 425.00	₹ 170.00
0215	Fitter (grade -I)	Day	1.60	₹ 380.00	₹ 608.00
0212	Helper	Day	5.25	₹ 300.00	₹ 1,575.00
	TOTAL				₹ 78,653.11
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.10 %		₹ 78.65
	TOTAL				₹ 78,731.76
	Add for Barricading, Night Lamps and watchman etc.	@	0.07 %		₹ 55.11
	TOTAL				₹ 78,786.87
	Add for Sundries and contingencies	@	3.0 %		₹ 2,363.61
	TOTAL				₹ 81,150.48
	Add for water charges	@	1.0 %		₹ 811.50
	TOTAL				₹ 81,961.98
	Add 15% for contractor's profit and overheads	@	15%		₹ 12,294.30
	Cost for 22.00 mtr/ 17.54 q.				₹ 94,256.28
	Rate per mtr.				₹ 4,284.38
	Say				₹ 4,284.40
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.21	400 mm dia Ductile Iron Class K-9 pipes				
Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					
19142	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 400 mm dia	metre	22.00	₹ 5,000.00	₹ 110,000.00
0463	Carriage of pipes	100 metre	22.00	₹ 2,480.01	₹ 545.60
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.50	₹ 425.00	₹ 212.50
0215	Fitter (grade -I)	Day	2.00	₹ 380.00	₹ 760.00
0212	Helper	Day	6.00	₹ 300.00	₹ 1,800.00
	TOTAL				₹ 113,318.10
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.09 %		₹ 101.99
	TOTAL				₹ 113,420.09
	Add for Barricading, Night Lamps and watchman etc.	@	0.065 %		₹ 73.72
	TOTAL				₹ 113,493.81
	Add for Sundries and contingencies	@	3.0 %		₹ 3,404.81
	TOTAL				₹ 116,898.63
	Add for water charges	@	1.0 %		₹ 1,168.99
	TOTAL				₹ 118,067.61
	Add 15% for contractor's profit and overheads	@	15%		₹ 17,710.14
	Cost for 22.00 mtr/ 20.86 q.				₹ 135,777.75
	Rate per mtr.				₹ 6,171.72
	Say				₹ 6,171.70
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.22	450 mm dia Ductile Iron Class K-9 pipes				
Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)					
Materials :-					

19143	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 450 mm dia	metre	22.00	₹ 5,500.00	₹ 121,000.00
0464	Carriage of pipes	100 metre	22.00	₹ 3,031.11	₹ 666.84
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.65	₹ 425.00	₹ 276.25
0215	Fitter (grade -I)	Day	2.50	₹ 380.00	₹ 950.00
0212	Helper	Day	7.00	₹ 300.00	₹ 2,100.00
	TOTAL				₹ 124,993.09
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.085 %		₹ 106.24
	TOTAL				₹ 125,099.34
	Add for Barricading, Night Lamps and watchman etc.	@	0.06 %		₹ 75.06
	TOTAL				₹ 125,174.40
	Add for Sundries and contingencies	@	3.0 %		₹ 3,755.23
	TOTAL				₹ 128,929.63
	Add for water charges	@	1.0 %		₹ 1,289.30
	TOTAL				₹ 130,218.93
	Add 15% for contractor's profit and overheads	@	15%		₹ 19,532.84
	Cost for 22.00 mtr/ 24.41 q.				₹ 149,751.77
	Rate per mtr.				₹ 6,806.90
	Say				₹ 6,806.90
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.23	500 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19144	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 500 mm dia	metre	22.00	₹ 7,200.00	₹ 158,400.00
0465	Carriage of pipes	100 metre	22.00	₹ 3,011.11	₹ 662.44
	Labour:				
	For lowering & laying				
0216	Foreman	Day	0.85	₹ 425.00	₹ 361.25
0215	Fitter (grade -I)	Day	3.00	₹ 380.00	₹ 1,140.00
0212	Helper	Day	8.00	₹ 300.00	₹ 2,400.00
	TOTAL				₹ 162,963.69
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.075 %		₹ 122.22
	TOTAL				₹ 163,085.92
	Add for Barricading, Night Lamps and watchman etc.	@	0.05 %		₹ 81.54
	TOTAL				₹ 163,167.46
	Add for Sundries and contingencies	@	3.0 %		₹ 4,895.02
	TOTAL				₹ 168,062.48
	Add for water charges	@	1.0 %		₹ 1,680.62
	TOTAL				₹ 169,743.11
	Add 15% for contractor's profit and overheads	@	15%		₹ 25,461.47
	Cost for 22.00 mtr/ 28.49 q.				₹ 195,204.57
	Rate per mtr.				₹ 8,872.94
	Say				₹ 8,872.90
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.24	600 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19145	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 600 mm dia	metre	22.00	₹ 8,100.00	₹ 178,200.00

0466	Carriage of pipes	100 metre	22.00	₹ 4,546.68	₹ 1,000.27
	Labour:				
	For lowering & laying				
0216	Foreman	Day	1.00	₹ 425.00	₹ 425.00
0215	Fitter (grade -I)	Day	3.50	₹ 380.00	₹ 1,330.00
0212	Helper	Day	11.00	₹ 300.00	₹ 3,300.00
	TOTAL				₹ 184,255.27
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.06 %		₹ 110.55
	TOTAL				₹ 184,365.82
	Add for Barricading, Night Lamps and watchman etc.	@	0.04 %		₹ 73.75
	TOTAL				₹ 184,439.57
	Add for Sundries and contingencies	@	3.0 %		₹ 5,533.19
	TOTAL				₹ 189,972.76
	Add for water charges	@	1.0 %		₹ 1,899.73
	TOTAL				₹ 191,872.48
	Add 15% for contractor's profit and overheads	@	15%		₹ 28,780.87
	Cost for 22.00 mtr/ 37.10 q.				₹ 220,653.36
	Rate per mtr.				₹ 10,029.70
	Say				₹ 10,029.70
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.25	700 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19146	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 700 mm dia	metre	22.00	₹ 11,250.00	₹ 247,500.00
0418	Carriage of pipes	100 metre	22.00	₹ 4,546.68	₹ 1,000.27
	Labour:				
	For lowering & laying				
0216	Foreman	Day	1.20	₹ 425.00	₹ 510.00
0215	Fitter (grade -I)	Day	4.00	₹ 380.00	₹ 1,520.00
0212	Helper	Day	14.50	₹ 300.00	₹ 4,350.00
	TOTAL				₹ 254,880.27
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.05 %		₹ 127.44
	TOTAL				₹ 255,007.71
	Add for Barricading, Night Lamps and watchman etc.	@	0.03 %		₹ 76.50
	TOTAL				₹ 255,084.21
	Add for Sundries and contingencies	@	3.0 %		₹ 7,652.53
	TOTAL				₹ 262,736.74
	Add for water charges	@	1.0 %		₹ 2,627.37
	TOTAL				₹ 265,364.11
	Add 15% for contractor's profit and overheads	@	15%		₹ 39,804.62
	Cost for 22.00 mtr/ 47.86 q.				₹ 305,168.72
	Rate per mtr.				₹ 13,871.31
	Say				₹ 13,871.30
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.26	750 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19147	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 750 mm dia	metre	22.00	₹ 12,900.00	₹ 283,800.00
0419	Carriage of pipes	100 metre	22.00	₹ 4,546.68	₹ 1,000.27
	Labour:				

	For lowering & laying				
0216	Foreman	Day	1.35	₹ 425.00	₹ 573.75
0215	Fitter (grade -I)	Day	5.00	₹ 380.00	₹ 1,900.00
0212	Helper	Day	16.00	₹ 300.00	₹ 4,800.00
	TOTAL				₹ 292,074.02
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.045 %		₹ 131.43
	TOTAL				₹ 292,205.45
	Add for Barricading, Night Lamps and watchman etc.	@	0.028 %		₹ 81.82
	TOTAL				₹ 292,287.27
	Add for Sundries and contingencies	@	3.0 %		₹ 8,768.62
	TOTAL				₹ 301,055.89
	Add for water charges	@	1.0 %		₹ 3,010.56
	TOTAL				₹ 304,066.45
	Add 15% for contractor's profit and overheads	@	15%		₹ 45,609.97
	Cost for 22.00 mtr/ 47.86 q.				₹ 349,676.41
	Rate per mtr.				₹ 15,894.38
	Say				₹ 15,894.40
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.27	800 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19148	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 800 mm dia	metre	22.00	₹ 13,150.00	₹ 289,300.00
0419	Carriage of pipes	100 metre	22.00	₹ 4,546.68	₹ 1,000.27
	Labour:				
	For lowering & laying				
0216	Foreman	Day	1.50	₹ 425.00	₹ 637.50
0215	Fitter (grade -I)	Day	5.50	₹ 380.00	₹ 2,090.00
0212	Helper	Day	17.00	₹ 300.00	₹ 5,100.00
	TOTAL				₹ 298,127.77
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.04 %		₹ 119.25
	TOTAL				₹ 298,247.02
	Add for Barricading, Night Lamps and watchman etc.	@	0.025 %		₹ 74.56
	TOTAL				₹ 298,321.58
	Add for Sundries and contingencies	@	3.0 %		₹ 8,949.65
	TOTAL				₹ 307,271.23
	Add for water charges	@	1.0 %		₹ 3,072.71
	TOTAL				₹ 310,343.94
	Add 15% for contractor's profit and overheads	@	15%		₹ 46,551.59
	Cost for 22.00 mtr/ 58.76 q.				₹ 356,895.53
	Rate per mtr.				₹ 16,222.52
	Say				₹ 16,222.50
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.28	900 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19149	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 900 mm dia	metre	22.00	₹ 15,400.00	₹ 338,800.00
0420	Carriage of pipes	100 metre	22.00	₹ 6,820.02	₹ 1,500.40
	Labour:				
	For lowering & laying				
0216	Foreman	Day	1.75	₹ 425.00	₹ 743.75

0215	Fitter (grade -I)	Day	6.00	₹ 380.00	₹ 2,280.00
0212	Helper	Day	21.50	₹ 300.00	₹ 6,450.00
	TOTAL				₹ 349,774.15
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.03 %		₹ 104.93
	TOTAL				₹ 349,879.09
	Add for Barricading, Night Lamps and watchman etc.	@	0.015 %		₹ 52.48
	TOTAL				₹ 349,931.57
	Add for Sundries and contingencies	@	3.0 %		₹ 10,497.95
	TOTAL				₹ 360,429.52
	Add for water charges	@	1.0 %		₹ 3,604.30
	TOTAL				₹ 364,033.81
	Add 15% for contractor's profit and overheads	@	15%		₹ 54,605.07
	Cost for 22.00 mtr/ 70.68 q.				₹ 418,638.88
	Rate per mtr.				₹ 19,029.04
	Say				₹ 19,029.00
19.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
19.72.29	1000 mm dia Ductile Iron Class K-9 pipes				
	Operational input for providing & laying S&S Centrifugally cast/ductile iron pipes for 22.0 mtr. length (4 pipes 5.50 mtr long)				
	Materials :-				
19150	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 1000 mm dia	metre	22.00	₹ 17,300.00	₹ 380,600.00
0408	Carriage of pipes	100 metre	22.00	₹ 9,093.35	₹ 2,000.54
	Labour:				
	For lowering & laying				
0216	Foreman	Day	2.00	₹ 425.00	₹ 850.00
0215	Fitter (grade -I)	Day	7.00	₹ 380.00	₹ 2,660.00
0212	Helper	Day	25.00	₹ 300.00	₹ 7,500.00
	TOTAL				₹ 393,610.54
	Add for Ropes, Pulleys, Crow bars & ballies etc.	@	0.02 %		₹ 78.72
	TOTAL				₹ 393,689.26
	Add for Barricading, Night Lamps and watchman etc.	@	0.01%		₹ 39.37
	TOTAL				₹ 393,728.63
	Add for Sundries and contingencies	@	3.0 %		₹ 11,811.86
	TOTAL				₹ 405,540.49
	Add for water charges	@	1.0 %		₹ 4,055.40
	TOTAL				₹ 409,595.89
	Add 15% for contractor's profit and overheads	@	15%		₹ 61,439.38
	Cost for 22.00 mtr/ 83.64 q.				₹ 471,035.28
	Rate per mtr.				₹ 21,410.69
	Say				₹ 21,410.70
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.1	100 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	100 mm dia. ductile iron pipes double flanged				
	Weight of 1m pipe = 21.700 kg				
	Weight of 5 m pipes 21.700x5 = 108.50 Kg				
19170	Ductile Iron Pipe Class K-9 flanges and welding 100mm dia	metre	5.00	₹ 1,275.00	₹ 6,375.00
0456	Carriage of pipes	100 metre	5.00	₹ 272.80	₹ 13.64
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	1.09	₹ 130.45	₹ 142.19

SH : Water Supply					
	TOTAL				₹ 6,530.83
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 191.66
	TOTAL				₹ 6,722.49
	Add for water charges	@	1.0 %		₹ 67.22
	TOTAL				₹ 6,789.71
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 997.13
	Cost for 5 mtr.				₹ 7,786.84
	Rate per mtr.				₹ 1,557.37
	Say				₹ 1,557.40
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.2	150 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	150 mm dia. ductile iron pipes double flanged				
	Weight of 1m pipe = 32.600 kg				
	Weight of 5m pipes 32.600x5 = 163.00Kg				
19171	Ductile Iron Pipe Class K-9 flanges and welding 150 dia	metre	5.00	₹ 1,764.00	₹ 8,820.00
0458	Carriage of pipes	100 metre	5.00	₹ 454.67	₹ 22.73
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	1.63	₹ 130.45	₹ 212.63
	SH : Water Supply				
	TOTAL				₹ 9,055.36
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 265.28
	TOTAL				₹ 9,320.64
	Add for water charges	@	1.0 %		₹ 93.21
	TOTAL				₹ 9,413.85
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 1,380.18
	Cost for 5 mtr.				₹ 10,794.03
	Rate per mtr.				₹ 2,158.81
	Say				₹ 2,158.80
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.3	200 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	200 mm dia. ductile iron pipes double flanged				
	Weight of 1m pipe = 44.20 kg				
	Weight of 5m pipes 44.20 x5 = 221.00Kg				
19172	Ductile Iron Pipe Class K-9 flanges and welding 200 dia	metre	5.00	₹ 2,287.00	₹ 11,435.00
0459	Carriage of pipes	100 metre	5.00	₹ 737.30	₹ 36.87
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	2.21	₹ 130.45	₹ 288.29
	SH : Water Supply				
	TOTAL				₹ 11,760.15
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 344.16
	TOTAL				₹ 12,104.31
	Add for water charges	@	1.0 %		₹ 121.04
	TOTAL				₹ 12,225.35
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 1,790.56

	Cost for 5 mtr.				₹ 14,015.91
	Rate per mtr.				₹ 2,803.18
	Say				₹ 2,803.20
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.4	250 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	250 mm dia. ductile iron pipes double flanged				
	Weight of 1m pipe =59.400kg				
	Weight of 5m pipes 59.400x5 = 297.00Kg				
19173	Ductile Iron Pipe Class K-9 flanges and welding 250 dia	metre	5.00	₹ 3,200.00	₹ 16,000.00
0460	Carriage of pipes	100 metre	5.00	₹ 1,049.23	₹ 52.46
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	2.97	₹ 130.45	₹ 387.43
	SH : Water Supply				
	TOTAL				₹ 16,439.89
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 481.57
	TOTAL				₹ 16,921.46
	Add for water charges	@	1.0 %		₹ 169.21
	TOTAL				₹ 17,090.68
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 2,505.49
	Cost for 5 mtr.				₹ 19,596.17
	Rate per mtr.				₹ 3,919.23
	Say				₹ 3,919.20
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.5	300 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	300 mm dia. ductile iron pipes double flanged				
	Weight of 1m pipe =76.400kg				
	Weight of 5m pipes 76.400x5 = 382.00Kg				
19174	Ductile Iron Pipe Class K-9 flanges and welding 300 dia	metre	5.00	₹ 4,100.00	₹ 20,500.00
0461	Carriage of pipes	100 metre	5.00	₹ 1,299.05	₹ 64.95
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	3.82	₹ 130.45	₹ 498.31
	SH : Water Supply				
	TOTAL				₹ 21,063.26
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 616.95
	TOTAL				₹ 21,680.21
	Add for water charges	@	1.0 %		₹ 216.80
	TOTAL				₹ 21,897.01
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 3,209.81
	Cost for 5 mtr.				₹ 25,106.82
	Rate per mtr.				₹ 5,021.36
	Say				₹ 5,021.40
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.6	350 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount

Details of cost for 5 metre					
Materials :-					
350 mm dia. ductile iron pipes double flanged					
Weight of 1m pipe =91.400kg					
Weight of 5m pipes 91.400x5 = 457.00Kg					
19175	Ductile Iron Pipe Class K-9 flanges and welding 350 dia	metre	5.00	₹ 5,000.00	₹ 25,000.00
0462	Carriage of pipes	100 metre	5.00	₹ 1,818.67	₹ 90.93
Labour					
(A)	For lowering & laying Rate same as per item no 19.23	quintal	4.57	₹ 130.45	₹ 596.14
SH : Water Supply					
	TOTAL				₹ 25,687.08
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 752.73
	TOTAL				₹ 26,439.80
	Add for water charges	@	1.0 %		₹ 264.40
	TOTAL				₹ 26,704.20
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 3,916.21
	Cost for 5 mtr.				₹ 30,620.41
	Rate per mtr.				₹ 6,124.08
	Say				₹ 6,124.10
19.73 Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :					
19.73.7 400 mm dia Ductile Iron Double Flanged					
Code	Description	Unit	Quantity	Rate	Amount
Details of cost for 5 metre					
Materials :-					
400 mm dia. ductile iron pipes double flanged					
Weight of 1m pipe =108.100kg					
Weight of 5m pipes 108.100x5 = 540.50Kg					
19176	Ductile Iron Pipe Class K-9 flanges and welding 400 dia	metre	5.00	₹ 6,550.00	₹ 32,750.00
0463	Carriage of pipes	100 metre	5.00	₹ 2,480.01	₹ 124.00
Labour					
(A)	For lowering & laying Rate same as per item no 19.23	quintal	5.40	₹ 130.45	₹ 704.41
SH : Water Supply					
	TOTAL				₹ 33,578.41
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 986.22
	TOTAL				₹ 34,564.63
	Add for water charges	@	1.0 %		₹ 345.65
	TOTAL				₹ 34,910.28
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 5,130.88
	Cost for 5 mtr.				₹ 40,041.16
	Rate per mtr.				₹ 8,008.23
	Say				₹ 8,008.20
19.73 Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :					
19.73.8 450 mm dia Ductile Iron Double Flanged					
Code	Description	Unit	Quantity	Rate	Amount
Details of cost for 5 metre					
Materials :-					
450 mm dia. ductile iron pipes double flanged					
Weight of 1m pipe =127.800kg					
Weight of 5m pipes 127.800x5 = 639.00Kg					
19177	Ductile Iron Pipe Class K-9 flanges and welding 450 dia	metre	5.00	₹ 7,100.00	₹ 35,500.00
0464	Carriage of pipes	100 metre	5.00	₹ 3,031.11	₹ 151.56

Labour					
(A)	For lowering & laying Rate same as per item no 19.23	quintal	6.39	₹ 130.45	₹ 833.56
SH : Water Supply					
	TOTAL				₹ 36,485.11
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 1,069.55
	TOTAL				₹ 37,554.66
	Add for water charges	@	1.0 %		₹ 375.55
	TOTAL				₹ 37,930.21
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 5,564.50
	Cost for 5 mtr.				₹ 43,494.70
	Rate per mtr.				₹ 8,698.94
	Say				₹ 8,698.90
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.9	500 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount
Details of cost for 5 metre					
Materials :-					
500 mm dia. ductile iron pipes double flanged					
Weight of 1m pipe =147.900kg					
Weight of 5m pipes 147.900x5 = 739.50Kg					
19178	Ductile Iron Pipe Class K-9 flanges and welding 500 dia	metre	5.00	₹ 9,900.00	₹ 49,500.00
0465	Carriage of pipes	100 metre	5.00	₹ 3,011.11	₹ 150.56
Labour					
(A)	For lowering & laying Rate same as per item no 19.23	quintal	7.40	₹ 130.45	₹ 965.31
SH : Water Supply					
	TOTAL				₹ 50,615.86
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 1,489.52
	TOTAL				₹ 52,105.38
	Add for water charges	@	1.0 %		₹ 521.05
	TOTAL				₹ 52,626.43
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 7,749.17
	Cost for 5 mtr.				₹ 60,375.60
	Rate per mtr.				₹ 12,075.12
	Say				₹ 12,075.10
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.10	600 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount
Details of cost for 5 metre					
Materials :-					
600 mm dia. ductile iron pipes double flanged					
Weight of 1m pipe =198.900kg					
Weight of 5m pipes 198.900x5 = 994.50Kg					
19179	Ductile Iron Pipe Class K-9 flanges and welding 600 dia	metre	5.00	₹ 12,800.00	₹ 64,000.00
0466	Carriage of pipes	100 metre	5.00	₹ 4,546.68	₹ 227.33
Labour					
(A)	For lowering & laying Rate same as per item no 19.23	quintal	9.95	₹ 130.45	₹ 1,297.95
SH : Water Supply					
	TOTAL				₹ 65,525.28
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 1,926.82
	TOTAL				₹ 67,452.10
	Add for water charges	@	1.0 %		₹ 674.52
	TOTAL				₹ 68,126.62

	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 10,024.30
	Cost for 5 mtr.				₹ 78,150.92
	Rate per mtr.				₹ 15,630.18
	Say				₹ 15,630.20
19.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K 9 conforming to IS : 8329 :				
19.73.11	700 mm dia Ductile Iron Double Flanged				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 5 metre				
	Materials :-				
	700 mm dia. ductile iron pipes double flanged				
	Weight of 1m pipe =254.90 kg				
	Weight of 5m pipes 254.90x5 = 1274.50 Kg				
19180	Ductile Iron Pipe Class K-9 flanges and welding 700 dia	metre	5.00	₹ 15,800.00	₹ 79,000.00
0418	Carriage of pipes	100 metre	5.00	₹ 4,546.68	₹ 227.33
	Labour				
(A)	For lowering & laying Rate same as per item no 19.23	quintal	12.75	₹ 130.45	₹ 1,663.20
	SH : Water Supply				
	TOTAL				₹ 80,890.53
	Add for Sundries and contingencies (except "A")	@	3.0 %		₹ 2,376.82
	TOTAL				₹ 83,267.35
	Add for water charges	@	1.0 %		₹ 832.67
	TOTAL				₹ 84,100.03
	Add 15% for contractor's profit and overheads(except "A")	@	15%		₹ 12,365.52
	Cost for 5 mtr.				₹ 96,465.55
	Rate per mtr.				₹ 19,293.11
	Say				₹ 19,293.10
19.74	Providing and fixing unplastisised P.V.C. connection pipe with PTMT Nuts of approved quality and colour.				
19.74.1	15 mm nominal bore with 30cm length.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no				
	Materials :				
19222	15 mm nominal bore and 30 cm length PVC connection pipe with P.T.M.T. Nuts	each	1.00	₹ 38.00	₹ 38.00
	TOTAL				₹ 38.00
	Add for Carriage of materials and fixing charges etc.	@	50.0 %		₹ 19.00
	TOTAL				₹ 57.00
	Add for Sundries and contingencies	@	3.0%		₹ 1.71
	TOTAL				₹ 58.71
	Add 15% for contractor's profit and overheads	@	15%		₹ 8.81
	Rate for per per connection pipe				₹ 67.52
	Say				₹ 67.50
19.74	Providing and fixing unplastisised P.V.C. connection pipe with PTMT Nuts of approved quality and colour.				
19.74.2	15 mm nominal bore with 45 cm length.				
	Details of cost for one no				
	Materials :				
19223	15 mm nominal bore and 45 cm length PVC connection pipe with P.T.M.T. Nuts	each	1.00	₹ 40.00	₹ 40.00
	TOTAL				₹ 40.00
	Add for Carriage of materials and fixing charges etc.	@	50.0 %		₹ 20.00

	TOTAL				₹	60.00
	Add for Sundries and contingencies	@	3.0%		₹	1.80
	TOTAL				₹	61.80
	Add 15% for contractor's profit and overheads	@	15%		₹	9.27
	Rate for per per connection pipe				₹	71.07
	Say				₹	71.10
19.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.					
19.75.1	15 mm nominal bore. Weighing not less than 32gms.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no					
	Materials :					
19224	P.T.M.T. extension nipple 15mm	each	1.00	₹ 25.00	₹	25.00
	TOTAL				₹	25.00
	Add for Carriage of materials and fixing charges etc.	@	20.0 %		₹	5.00
	TOTAL				₹	30.00
	Add for Sundries and contingencies	@	3.0%		₹	0.90
	TOTAL				₹	30.90
	Add 15% for contractor's profit and overheads	@	15%		₹	4.64
	Rate for per extension nipple				₹	35.54
	Say				₹	35.50
19.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.					
19.75.2	20 mm nominal bore. Weighing not less than 40 gms.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no					
	Materials :					
19225	P.T.M.T. extension nipple 20 mm	each	1.00	₹ 35.00	₹	35.00
	TOTAL				₹	35.00
	Add for Carriage of materials and fixing charges etc.	@	18.0 %		₹	6.30
	TOTAL				₹	41.30
	Add for Sundries and contingencies	@	3.0%		₹	1.24
	TOTAL				₹	42.54
	Add 15% for contractor's profit and overheads	@	15%		₹	6.38
	Rate for per extension nipple				₹	48.92
	Say				₹	48.90
19.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.					
19.75.3	25 mm nominal bore. Weighing not less than 62 gms.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one no					
	Materials :					
19226	P.T.M.T. extension nipple 25 mm	each	1.00	₹ 45.00	₹	45.00
	TOTAL				₹	45.00
	Add for Carriage of materials and fixing charges etc.	@	12.0 %		₹	5.40
	TOTAL				₹	50.40
	Add for Sundries and contingencies	@	3.0%		₹	1.51

	TOTAL				₹	51.91
	Add 15% for contractor's profit and overheads	@	15%		₹	7.79
	Rate for per extension nipple				₹	59.70
	Say				₹	59.70
18.76	Cutting holes upto 30x30 cm in walls including making good the same :					
18.76.1	With 1st class bricks.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 holes					
	Thicness of wall = 345 mm					
	Size of hole= (300 x 300) mm					
	Quantity of work involved for making good the wall:					
	1. Bricwork in C.M 1:4 = 10X0.30X0.30X0.345=0.3105 cum					
	Less for pipe portion = say 33%= (-) 0.1025 cum = Total 0.208 cum					
	2. 12 mm thick cement plaster 1:4 with a floating coat of neat cement :					
	10x2x0.30x0.30=1.80 sqm					
	Less for pipe portion = say 33%= (-) 0.594 sqm = Total 1.206 sqm					
	Materials :					
03001	Cement:	t	0.029	₹ 6,100.00	₹	176.90
	For Bricwork : 0.1976 q					
	For plaster :0.0925 q Total= 0.2901 q.					
02003	Sand:	cum	0.0756	₹ 370.00	₹	27.97
	For Bricwork : 0.57 cum					
	For plaster :0.0186 cum Total= 0.0756 cum					
06001	Bricks 1st class	1000 nos.	79.00	₹ 8,027.00	₹	634.13
	Carriage:					
0421	Cement:	t	0.029	₹ 110.94	₹	3.22
0425	Sand:	cum	0.0756	₹ 142.63	₹	10.78
0406	Bricks	1000 nos.	79.00	₹ 332.82	₹	26.29
	Labour:					
	For cutting holes					
0220	Mason 2nd class	Day	0.20	₹ 380.00	₹	76.00
0203	Belder	Day	1.00	₹ 300.00	₹	300.00
	For making good the walls					
0216	Foreman	Day	0.10	₹ 425.00	₹	42.50
0219	Mason 1st class	Day	0.25	₹ 425.00	₹	106.25
0203	Belder	Day	0.60	₹ 300.00	₹	180.00
0212	coolie	Day	0.25	₹ 300.00	₹	75.00
0205	Waterman	Day	0.25	₹ 300.00	₹	75.00
	TOTAL				₹	1,734.05
	Add for cost and sharpening of chisels	@	4.50 %		₹	78.03
	TOTAL				₹	1,812.08
	Add for Sundries and contingencies	@	3.0%		₹	54.36
	TOTAL				₹	1,866.44
	Add for water charges	@	1.0%		₹	18.66
	TOTAL				₹	1,885.11
	Add 15% for contractor's profit and overheads		15%		₹	282.77
	Cost for 10 holes				₹	2,167.87
	Rate per Hole				₹	216.79
	Say				₹	216.80
19.77	Cutting holes upto 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 holes					
	Size of hole= (150 x150x150) mm					
	Quantity of work involved for repair work :					
	1. Cement concrete 1:2:4 = 10X0.15X0.15X0.15=0.03375 cum					
	Less portion occupied by pipe, say 80 mm dia pipe = 1x3.14x0.10x0.10/4 x 0.15= (-) 0.0118 cum = Total 0.03257cum					

	2. 12 mm thick cement plaster 1:3 with a floating coat of neat cement at top and bottom with water proofing compound :				
	2x 10 x0.15 x 0.15 = 0.45 sqm				
	Less for pipe portion =1x3.14x0.10x0.10/4 = (-) 0.0079 sqm = Total 0.4421 sqm.				
	Materials :				
03001	Cement:	t	0.0146	₹ 6,100.00	₹ 89.06
	For concrete : 0.104 q				
	For plaster :0.042 q Total= 0.146 q.				
04007	Stone aggregate (12.5 mm)	cum	0.031	₹ 4,005.00	₹ 124.16
02003	Sand:	cum	0.1598	₹ 370.00	₹ 59.13
	For concrete : 0.153 q				
	For plaster :0.0068 cum Total= 0.1598 cum				
	Carriage:				
0421	Cement:	t	0.0146	₹ 110.94	₹ 1.62
0425	Sand:	cum	0.1598	₹ 142.63	₹ 22.79
0405	Aggregate	1000 nos.	0.031	₹ 159.75	₹ 4.95
	Labour:				
	For cutting holes & also for cutting steel				
0216	Foreman	Day	0.30	₹ 425.00	₹ 127.50
0203	Belder	Day	2.25	₹ 300.00	₹ 675.00
	For repair on fixing the pipe				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0219	Mason 1st class	Day	0.125	₹ 425.00	₹ 53.13
0208	Carpenter (average)	Day	0.125	₹ 400.00	₹ 50.00
0203	Belder	Day	0.475	₹ 300.00	₹ 142.50
0212	Coolie	Day	0.300	₹ 300.00	₹ 90.00
0205	Waterman	Day	0.125	₹ 300.00	₹ 37.50
TOTAL					₹ 1,519.83
	Add for Ladders, Ballies,Chalies etc.	@	2.5 %		₹ 38.00
	TOTAL				₹ 1,557.83
	Add for Planks and Binding wire, Nails etc. for form work	@	5.0 %		₹ 77.89
	TOTAL				₹ 1,635.72
	Add for cost of Chisels and sharpening the same etc.	@	3.0 %		₹ 49.07
	TOTAL				₹ 1,684.79
	Add for Sundries and contingencies	@	3.0%		₹ 50.54
	TOTAL				₹ 1,735.33
	Add for water charges	@	1.0 %		₹ 17.35
	TOTAL				₹ 1,752.69
	Add 15% for contractor's profit and overheads	@	15%		₹ 262.90
	Cost for 10 holes				₹ 2,015.59
	Rate per Hole				₹ 201.56
	Say				₹ 201.60
19.78	Making chases upto 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10.00 metres				
	Cement concrete 1:3:6= 1x10x0.075x0.075=0.05625 cum				
	Less for space occupied by a G.I Pipe sa 15 mm dia.				
	=3.14x0.01075x0.01075x10.00= 0.003628 cum				
	So, Total = 0.0526 cum				
	MATERIAL:				
03001	Cement	t	0.011	₹ 6,100.00	₹ 67.10
04006	20 mm stone aggregate	cum	0.047	₹ 3,969.00	₹ 186.54
02003	Fine Sand	cum	0.024	₹ 370.00	₹ 8.88
	CARRIAGE:				
0421	Cement	t	0.011	₹ 110.94	₹ 1.22
0405	20 mm stone aggregate	cum	0.047	₹ 159.75	₹ 7.51
0425	Fine Sand	cum	0.024	₹ 142.63	₹ 3.42

	FORM WORK:				
04014	(i) 25 mm 2nd class wood planks				
	Leaving 25% portion for pouring concrete				
	= $1 \times 7.5 \times 0.15 \times 0.025 = 0.028$ cum, say 28.00 cudm	10 cudm	28.00	₹ 145.00	₹ 10.15
04010	(ii) Ballies 100 mm dia for support $4 \times 2 \times 3.00$ m = 24.00 mtr.	mtr	24.00	₹ 59.00	₹ 35.40
	The above materials can be used for 40 times.				
	Hence cost for using once = Cost of planks & Ballies incl. carriage/40				
	LABOUR:				
	(i) For cutting chases and disposing the cut materials				
0216	Foreman	Day	0.15	₹ 425.00	₹ 63.75
0212	Helper	Day	0.75	₹ 300.00	₹ 225.00
	(ii) For fixing formwork				₹ -
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0210	Carpenter 2nd class	Day	0.125	₹ 380.00	₹ 47.50
0212	Helper	Day	0.125	₹ 300.00	₹ 37.50
	(iii) For concreting and finishing incl. roughening the surface				₹ -
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0219	Mason (1st class)	Day	0.125	₹ 425.00	₹ 53.13
0203	Beldar	Day	0.125	₹ 300.00	₹ 37.50
0212	Helper	Day	0.250	₹ 300.00	₹ 75.00
0205	waterman	Day	0.125	₹ 300.00	₹ 37.50
	TOTAL				₹ 973.60
	Add for ladders,nails,Binding wire etc.	@	2.0 %		₹ 19.47
	TOTAL				₹ 993.07
	Add for wire brushes, cost and sharpening of chisels etc.	@	2.0 %		₹ 19.86
	TOTAL				₹ 1,012.93
	Add for Sundries and contingencies	@	3.0%		₹ 30.39
	TOTAL				₹ 1,043.32
	Add for water charges	@	1.0%		₹ 10.43
	TOTAL				₹ 1,053.75
	Add 15% for contractor's profit and overheads	@	15%		₹ 158.06
	Cost for 10.00 mtr length				₹ 1,211.82
	Rate per mtr.				₹ 121.18
	Say				₹ 121.20
19.79	Making hole upto 20x20 cm and embedding pipes upto 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) including disposal of malba.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 mtr. length.				
	Pipe size 100 mm dia.				
	External diameter =124 mm.				
	Quantity of work involved :				
	1. Cement concrete 1:3:6 = $1 \times 0.20 \times 0.20 \times 10.00 = 0.40$ cum				
	Less portion occupied by pipe, say 100 mm dia pipe = $1 \times 3.14 \times 0.124 \times 0.124 / 4 \times 10 = (-) 0.12$ cum =				
	Total 0.280 cum				
	Materials :				
03001	Cement:	t	0.0616	₹ 6,100.00	₹ 375.76
04006	Stone aggregate (20 mm)	cum	0.270	₹ 3,969.00	₹ 1,071.63
02003	Sand:	cum	0.136	₹ 370.00	₹ 50.32
	Carriage:				
0421	Cement:	t	0.0616	₹ 110.94	₹ 6.83
0425	Sand:	cum	0.136	₹ 142.63	₹ 19.40
0405	Aggregate	1000 nos.	0.270	₹ 159.75	₹ 43.13
	Labour:				
	For concreting & disposal of Malba.				
0216	Foreman	Day	0.080	₹ 425.00	₹ 34.00
0219	Mason 1st class	Day	0.125	₹ 425.00	₹ 53.13
0203	Belder	Day	0.375	₹ 300.00	₹ 112.50
0212	Coolie	Day	0.25	₹ 300.00	₹ 75.00

0205	Waterman	Day	0.125	₹ 300.00	₹ 37.50
	TOTAL				₹ 1,879.20
	Add for Sundries and contingencies	@	3.0%		₹ 56.38
	TOTAL				₹ 1,935.58
	Add for water charges	@	1.0%		₹ 19.36
	TOTAL				₹ 1,954.93
	Add 15% for contractor's profit and overheads		15%		₹ 293.24
	Cost for 10.00 mtr. pipe				₹ 2,248.17
	Rate per mtr.				₹ 224.82
	Say				₹ 224.80
DISINFECTING/DISMANTLING/CUTTING C.I PIPES					
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.1	80 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 80 mm dia pipe				
	3x3.1416/4x(0.08)2 x100x1000x0.5 gms/litre				
19001	= 753.98 gms = 0.00754 q = say,0.008 q.	quintal	0.008	₹ 2,400.00	₹ 19.20
	Labour:				
0216	Foreman	Day	0.200	₹ 425.00	₹ 85.00
0215	Fitter (grade-I)	Day	0.750	₹ 380.00	₹ 285.00
0212	Helper	Day	0.750	₹ 300.00	₹ 225.00
	TOTAL				₹ 614.20
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	8.0 %		₹ 49.14
	TOTAL				₹ 663.34
	Add for Sundries and contingencies	@	3.0 %		₹ 19.90
	TOTAL				₹ 683.24
	Add for water charges & electricity	@	1.5 %		₹ 10.25
	TOTAL				₹ 693.48
	Add 15% for contractor's profit and overheads	@	15%		₹ 104.02
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 797.51
	Say				₹ 797.50
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.2	100 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 100 mm dia pipe				
	3x3.1416/4x(0.10)2 x100x1000x0.5 gms/litre				
19001	= 1178.10 gms = 0.0118 q = say,0.012 q.	quintal	0.012	₹ 2,400.00	₹ 28.80
	Labour:				
0216	Foreman	Day	0.300	₹ 425.00	₹ 127.50
0215	Fitter (grade-I)	Day	1.000	₹ 380.00	₹ 380.00
0212	Helper	Day	1.000	₹ 300.00	₹ 300.00
	TOTAL				₹ 836.30

	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.50 %		₹ 62.72
	TOTAL				₹ 899.02
	Add for Sundries and contingencies	@	3.0 %		₹ 26.97
	TOTAL				₹ 925.99
	Add for water charges & electricity	@	1.5 %		₹ 13.89
	TOTAL				₹ 939.88
	Add 15% for contractor's profit and overheads	@	15%		₹ 140.98
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 1,080.87
	Say				₹ 1,080.90
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.3	125 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 125 mm dia pipe				
	3x3.1416/4x(0.125)2 x100x1000x0.5 gms/litre				
19001	= 1840.78 gms = 0.0184 q = say,0.018 q.	quintal	0.018	₹ 2,400.00	₹ 43.20
	Labour:				
0216	Foreman	Day	0.350	₹ 425.00	₹ 148.75
0215	Fitter (grade-I)	Day	1.200	₹ 380.00	₹ 456.00
0212	Helper	Day	1.200	₹ 300.00	₹ 360.00
	TOTAL				₹ 1,007.95
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.0 %		₹ 70.56
	TOTAL				₹ 1,078.51
	Add for Sundries and contingencies	@	3.0 %		₹ 32.36
	TOTAL				₹ 1,110.86
	Add for water charges & electricity	@	1.5 %		₹ 16.66
	TOTAL				₹ 1,127.52
	Add 15% for contractor's profit and overheads	@	15%		₹ 169.13
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 1,296.65
	Say				₹ 1,296.70
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.4	150 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 150 mm dia pipe				
	3x3.1416/4x(0.15)2 x100x1000x0.5 gms/litre				
19001	= 2650.72 gms = 0.0265 q = say,0.027 q.	quintal	0.027	₹ 2,400.00	₹ 64.80
	Labour:				
0216	Foreman	Day	0.400	₹ 425.00	₹ 170.00
0215	Fitter (grade-I)	Day	1.500	₹ 380.00	₹ 570.00
0212	Helper	Day	1.500	₹ 300.00	₹ 450.00
	TOTAL				₹ 1,254.80
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.50 %		₹ 94.11
	TOTAL				₹ 1,348.91
	Add for Sundries and contingencies	@	3.0 %		₹ 40.47

	TOTAL				₹ 1,389.38
	Add for water charges & electricity	@	1.5 %		₹ 20.84
	TOTAL				₹ 1,410.22
	Add 15% for contractor's profit and overheads	@	15%		₹ 211.53
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 1,621.75
	Say				₹ 1,621.80
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.5	200 mm diameter C.I, pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 200 mm dia pipe				
	3x3.1416/4x(0.20)2 x100x1000x0.5 gms/litre				
19001	= 4712.40 gms = 0.047 q	quintal	0.047	₹ 2,400.00	₹ 112.80
	Labour:				
0216	Foreman	Day	0.200	₹ 425.00	₹ 85.00
0215	Fitter (grade-I)	Day	1.800	₹ 380.00	₹ 684.00
0212	Helper	Day	1.800	₹ 300.00	₹ 540.00
	TOTAL				₹ 1,421.80
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.0 %		₹ 99.53
	TOTAL				₹ 1,521.33
	Add for Sundries and contingencies	@	3.0 %		₹ 45.64
	TOTAL				₹ 1,566.97
	Add for water charges & electricity	@	1.5 %		₹ 23.50
	TOTAL				₹ 1,590.47
	Add 15% for contractor's profit and overheads	@	15%		₹ 238.57
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 1,829.04
	Say				₹ 1,829.00
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.6	250 mm diameter C.I, pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 250 mm dia pipe				
	3x3.1416/4x(0.25)2 x100x1000x0.5 gms/litre				
19001	= 7363.125 gms = 0.074 q	quintal	0.074	₹ 2,400.00	₹ 177.60
	Labour:				
0216	Foreman	Day	0.300	₹ 425.00	₹ 127.50
0215	Fitter (grade-I)	Day	2.250	₹ 380.00	₹ 855.00
0212	Helper	Day	2.250	₹ 300.00	₹ 675.00
	TOTAL				₹ 1,835.10
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.0 %		₹ 128.46
	TOTAL				₹ 1,963.56
	Add for Sundries and contingencies	@	3.0 %		₹ 58.91
	TOTAL				₹ 2,022.46
	Add for water charges & electricity	@	1.5 %		₹ 30.34
	TOTAL				₹ 2,052.80
	Add 15% for contractor's profit and overheads	@	15%		₹ 307.92

	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 2,360.72
	Say				₹ 2,360.70
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.7	300 mm diameter C.I, pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 300 mm dia pipe				
	3x3.1416/4x(0.30)2 x100x1000x0.5 gms/litre				
19001	= 10602.90 gms = 0.106 q	quintal	0.106	₹ 2,400.00	₹ 254.40
	Labour:				
0216	Foreman	Day	0.400	₹ 425.00	₹ 170.00
0215	Fitter (grade-I)	Day	2.450	₹ 380.00	₹ 931.00
0212	Helper	Day	2.450	₹ 300.00	₹ 735.00
	TOTAL				₹ 2,090.40
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	8.0 %		₹ 167.23
	TOTAL				₹ 2,257.63
	Add for Sundries and contingencies	@	3.0 %		₹ 67.73
	TOTAL				₹ 2,325.36
	Add for water charges & electricity	@	1.5 %		₹ 34.88
	TOTAL				₹ 2,360.24
	Add 15% for contractor's profit and overheads	@	15%		₹ 354.04
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 2,714.28
	Say				₹ 2,714.30
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.8	350 mm diameter C.I, pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 350 mm dia pipe				
	3x3.1416/4x(0.35)2 x100x1000x0.5 gms/litre				
19001	= 14431.72 gms = 0.144 q	quintal	0.144	₹ 2,400.00	₹ 345.60
	Labour:				
0216	Foreman	Day	0.500	₹ 425.00	₹ 212.50
0215	Fitter (grade-I)	Day	2.600	₹ 380.00	₹ 988.00
0212	Helper	Day	2.600	₹ 300.00	₹ 780.00
	TOTAL				₹ 2,326.10
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	8.5 %		₹ 197.72
	TOTAL				₹ 2,523.82
	Add for Sundries and contingencies	@	3.0 %		₹ 75.71
	TOTAL				₹ 2,599.53
	Add for water charges & electricity	@	1.5 %		₹ 38.99
	TOTAL				₹ 2,638.53
	Add 15% for contractor's profit and overheads	@	15%		₹ 395.78
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 3,034.30
	Say				₹ 3,034.30

19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.9	400 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 400 mm dia pipe				
	3x3.1416/4x(0.40)2 x100x1000x0.5 gms/litre				
19001	= 18849.60 gms = 0.188 q	quintal	0.188	₹ 2,400.00	₹ 451.20
	Labour:				
0216	Foreman	Day	0.600	₹ 425.00	₹ 255.00
0215	Fitter (grade-I)	Day	2.800	₹ 380.00	₹ 1,064.00
0212	Helper	Day	2.800	₹ 300.00	₹ 840.00
	TOTAL				₹ 2,610.20
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	9.5 %		₹ 247.97
	TOTAL				₹ 2,858.17
	Add for Sundries and contingencies	@	3.0 %		₹ 85.75
	TOTAL				₹ 2,943.91
	Add for water charges & electricity	@	1.5 %		₹ 44.16
	TOTAL				₹ 2,988.07
	Add 15% for contractor's profit and overheads	@	15%		₹ 448.21
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 3,436.28
	Say				₹ 3,436.30
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.10	450 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 450 mm dia pipe				
	3x3.1416/4x(0.45)2 x100x1000x0.5 gms/litre				
19001	= 23856.50 gms = 0.239 q	quintal	0.239	₹ 2,400.00	₹ 573.60
	Labour:				
0216	Foreman	Day	0.700	₹ 425.00	₹ 297.50
0215	Fitter (grade-I)	Day	3.000	₹ 380.00	₹ 1,140.00
0212	Helper	Day	3.000	₹ 300.00	₹ 900.00
	TOTAL				₹ 2,911.10
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	10.00 %		₹ 291.11
	TOTAL				₹ 3,202.21
	Add for Sundries and contingencies	@	3.0 %		₹ 96.07
	TOTAL				₹ 3,298.28
	Add for water charges & electricity	@	1.5 %		₹ 49.47
	TOTAL				₹ 3,347.75
	Add 15% for contractor's profit and overheads	@	15%		₹ 502.16
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 3,849.91
	Say				₹ 3,849.90
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.11	500 mm diameter C.I. pipe.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 500 mm dia pipe				
	3x3.1416/4x(0.50) ² x100x1000x0.5 gms/litre				
19001	= 29452.50 gms = 0.295q	quintal	0.295	₹ 2,400.00	₹ 708.00
	Labour:				
0216	Foreman	Day	0.800	₹ 425.00	₹ 340.00
0215	Fitter (grade-I)	Day	3.100	₹ 380.00	₹ 1,178.00
0212	Helper	Day	3.100	₹ 300.00	₹ 930.00
	TOTAL				₹ 3,156.00
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	10.00 %		₹ 315.60
	TOTAL				₹ 3,471.60
	Add for Sundries and contingencies	@	3.0 %		₹ 104.15
	TOTAL				₹ 3,575.75
	Add for water charges & electricity	@	1.5 %		₹ 53.64
	TOTAL				₹ 3,629.38
	Add 15% for contractor's profit and overheads	@	15%		₹ 544.41
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 4,173.79
	Say				₹ 4,173.80
19.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory :				
19.80.12	600 mm diameter C.I. pipe.				
	Details of cost for disinfecting 100.00 metres length.				
	MATERIAL				
	Bleaching powder for 600 mm dia pipe				
	3x3.1416/4x(0.60) ² x100x1000x0.5 gms/litre				
19001	= 42411.60 gms = 0.424 q	quintal	0.424	₹ 2,400.00	₹ 1,017.60
	Labour:				
0216	Foreman	Day	1.000	₹ 425.00	₹ 425.00
0215	Fitter (grade-I)	Day	3.500	₹ 380.00	₹ 1,330.00
0212	Helper	Day	3.500	₹ 300.00	₹ 1,050.00
	TOTAL				₹ 3,822.60
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	10.00 %		₹ 382.26
	TOTAL				₹ 4,204.86
	Add for Sundries and contingencies	@	3.0 %		₹ 126.15
	TOTAL				₹ 4,331.01
	Add for water charges & electricity	@	1.5 %		₹ 64.97
	TOTAL				₹ 4,395.97
	Add 15% for contractor's profit and overheads	@	15%		₹ 659.40
	Cost for disinfecting C.I water mains for 100.00 mtr. length				₹ 5,055.37
	Say				₹ 5,055.40
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.1	80 mm diameter C.I. pipe.				
	Details of cost for 100 metres				

	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 80 mm dia =753.98/3 = 251.33 gm or 0.00251 q.				
19001	Bleaching powder	quintal	0.00251	₹ 2,400.00	₹ 6.02
	Labour:				
0216	Foreman	Day	0.100	₹ 425.00	₹ 42.50
0215	Fitter (grade-I)	Day	0.250	₹ 380.00	₹ 95.00
0212	Helper	Day	0.250	₹ 300.00	₹ 75.00
	TOTAL				₹ 218.52
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.00 %		₹ 15.30
	TOTAL				₹ 233.82
	Add for Sundries and contingencies	@	3.0 %		₹ 7.01
	TOTAL				₹ 240.84
	Add for water charges & electricity	@	1.5 %		₹ 3.61
	TOTAL				₹ 244.45
	Add 15% for contractor's profit and overheads	@	15%		₹ 36.67
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 281.12
	Say				₹ 281.10
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.2	100 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 100 mm dia =1178.10/3 = 392.70 gm or 0.003972 q.				
19001	Bleaching powder	quintal	0.003972	₹ 2,400.00	₹ 9.53
	Labour:				
0216	Foreman	Day	0.125	₹ 425.00	₹ 53.13
0215	Fitter (grade-I)	Day	0.350	₹ 380.00	₹ 133.00
0212	Helper	Day	0.350	₹ 300.00	₹ 105.00
	TOTAL				₹ 300.66
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.50 %		₹ 22.55
	TOTAL				₹ 323.21
	Add for Sundries and contingencies	@	3.0 %		₹ 9.70
	TOTAL				₹ 332.90
	Add for water charges & electricity	@	1.5 %		₹ 4.99
	TOTAL				₹ 337.90
	Add 15% for contractor's profit and overheads	@	15%		₹ 50.68
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 388.58
	Say				₹ 388.60
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.3	125 mm diameter C.I. pipe.				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 125 mm dia = $1840.78/3 = 613.59$ gm or 0.00614 q.				
19001	Bleaching powder	quintal	0.00614	₹ 2,400.00	₹ 14.74
	Labour:				
0216	Foreman	Day	0.150	₹ 425.00	₹ 63.75
0215	Fitter (grade-I)	Day	0.400	₹ 380.00	₹ 152.00
0212	Helper	Day	0.400	₹ 300.00	₹ 120.00
	TOTAL				₹ 350.49
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	8.0 %		₹ 28.04
	TOTAL				₹ 378.52
	Add for Sundries and contingencies	@	3.0 %		₹ 11.36
	TOTAL				₹ 389.88
	Add for water charges & electricity	@	1.5 %		₹ 5.85
	TOTAL				₹ 395.73
	Add 15% for contractor's profit and overheads	@	15%		₹ 59.36
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 455.09
	Say				₹ 455.10
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.4	150 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 150 mm dia = $2650.72/3 = 883.57$ gm or 0.008836 q.				
19001	Bleaching powder	quintal	0.008836	₹ 2,400.00	₹ 21.21
	Labour:				
0216	Foreman	Day	0.200	₹ 425.00	₹ 85.00
0215	Fitter (grade-I)	Day	0.500	₹ 380.00	₹ 190.00
0212	Helper	Day	0.500	₹ 300.00	₹ 150.00
	TOTAL				₹ 446.21
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	8.5 %		₹ 37.93
	TOTAL				₹ 484.13
	Add for Sundries and contingencies	@	3.0 %		₹ 14.52
	TOTAL				₹ 498.66
	Add for water charges & electricity	@	1.5 %		₹ 7.48
	TOTAL				₹ 506.14
	Add 15% for contractor's profit and overheads	@	15%		₹ 75.92
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 582.06
	Say				₹ 582.10
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				

19.81.5	200 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 200 mm dia = $4712.4/3 = 1570.80$ gm or 0.01571 q.				
19001	Bleaching powder	quintal	0.01571	₹ 2,400.00	₹ 37.70
	Labour:				
0216	Foreman	Day	0.200	₹ 425.00	₹ 85.00
0215	Fitter (grade-I)	Day	0.600	₹ 380.00	₹ 228.00
0212	Helper	Day	0.600	₹ 300.00	₹ 180.00
	TOTAL				₹ 530.70
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.0 %		₹ 37.15
	TOTAL				₹ 567.85
	Add for Sundries and contingencies	@	3.0 %		₹ 17.04
	TOTAL				₹ 584.89
	Add for water charges & electricity	@	1.5 %		₹ 8.77
	TOTAL				₹ 593.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 89.05
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 682.71
	Say				₹ 682.70
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.6	250 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 250 mm dia = $7363.125/3 = 2454.375$ gm or 0.02454 q.				
19001	Bleaching powder	quintal	0.02454	₹ 2,400.00	₹ 58.90
	Labour:				
0216	Foreman	Day	0.250	₹ 425.00	₹ 106.25
0215	Fitter (grade-I)	Day	0.750	₹ 380.00	₹ 285.00
0212	Helper	Day	0.750	₹ 300.00	₹ 225.00
	TOTAL				₹ 675.15
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	7.5 %		₹ 50.64
	TOTAL				₹ 725.78
	Add for Sundries and contingencies	@	3.0 %		₹ 21.77
	TOTAL				₹ 747.56
	Add for water charges & electricity	@	1.5 %		₹ 11.21
	TOTAL				₹ 758.77
	Add 15% for contractor's profit and overheads	@	15%		₹ 113.82
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 872.58
	Say				₹ 872.60

19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.7	300 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 300 mm dia = $10602.90/3 = 3534.30$ gm or 0.03534 q.				
19001	Bleaching powder	quintal	0.03534	₹ 2,400.00	₹ 84.82
	Labour:				
0216	Foreman	Day	0.300	₹ 425.00	₹ 127.50
0215	Fitter (grade-I)	Day	0.850	₹ 380.00	₹ 323.00
0212	Helper	Day	0.850	₹ 300.00	₹ 255.00
	TOTAL				₹ 790.32
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	8.0 %		₹ 63.23
	TOTAL				₹ 853.54
	Add for Sundries and contingencies	@	3.0 %		₹ 25.61
	TOTAL				₹ 879.15
	Add for water charges & electricity	@	1.5 %		₹ 13.19
	TOTAL				₹ 892.33
	Add 15% for contractor's profit and overheads	@	15%		₹ 133.85
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 1,026.18
	Say				₹ 1,026.20
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.8	350 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 350 mm dia = $14431.72/3 = 4810.57$ gm or 0.04811 q.				
19001	Bleaching powder	quintal	0.04811	₹ 2,400.00	₹ 115.46
	Labour:				
0216	Foreman	Day	0.350	₹ 425.00	₹ 148.75
0215	Fitter (grade-I)	Day	0.900	₹ 380.00	₹ 342.00
0212	Helper	Day	0.900	₹ 300.00	₹ 270.00
	TOTAL				₹ 876.21
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	8.5 %		₹ 74.48
	TOTAL				₹ 950.69
	Add for Sundries and contingencies	@	3.0 %		₹ 28.52
	TOTAL				₹ 979.21
	Add for water charges & electricity	@	1.5 %		₹ 14.69
	TOTAL				₹ 993.90
	Add 15% for contractor's profit and overheads	@	15%		₹ 149.09
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 1,142.99

	Say				₹ 1,143.00
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.9	400 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 400 mm dia = $18849.60/3 = 6283.20$ gm or 0.06283 q.				
19001	Bleaching powder	quintal	0.06283	₹ 2,400.00	₹ 150.79
	Labour:				
0216	Foreman	Day	0.400	₹ 425.00	₹ 170.00
0215	Fitter (grade-I)	Day	1.000	₹ 380.00	₹ 380.00
0212	Helper	Day	1.000	₹ 300.00	₹ 300.00
	TOTAL				₹ 1,000.79
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	9.0 %		₹ 90.07
	TOTAL				₹ 1,090.86
	Add for Sundries and contingencies	@	3.0 %		₹ 32.73
	TOTAL				₹ 1,123.59
	Add for water charges & electricity	@	1.5 %		₹ 16.85
	TOTAL				₹ 1,140.44
	Add 15% for contractor's profit and overheads	@	15%		₹ 171.07
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 1,311.51
	Say				₹ 1,311.50
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.10	450 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 450 mm dia = $23856.50/3 = 7952.17$ gm or 0.07952 q.				
19001	Bleaching powder	quintal	0.06283	₹ 2,400.00	₹ 150.79
	Labour:				
0216	Foreman	Day	0.450	₹ 425.00	₹ 191.25
0215	Fitter (grade-I)	Day	1.100	₹ 380.00	₹ 418.00
0212	Helper	Day	1.100	₹ 300.00	₹ 330.00
	TOTAL				₹ 1,090.04
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	9.5 %		₹ 103.55
	TOTAL				₹ 1,193.60
	Add for Sundries and contingencies	@	3.0 %		₹ 35.81
	TOTAL				₹ 1,229.40
	Add for water charges & electricity	@	1.5 %		₹ 18.44
	TOTAL				₹ 1,247.84
	Add 15% for contractor's profit and overheads	@	15%		₹ 187.18

	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 1,435.02
	Say				₹ 1,435.00
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.11	500 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 500 mm dia = $29452.50/3 = 9817.50$ gm or 0.098175 q.				
19001	Bleaching powder	quintal	0.098175	₹ 2,400.00	₹ 235.62
	Labour:				
0216	Foreman	Day	0.500	₹ 425.00	₹ 212.50
0215	Fitter (grade-I)	Day	1.150	₹ 380.00	₹ 437.00
0212	Helper	Day	1.150	₹ 300.00	₹ 345.00
	TOTAL				₹ 1,230.12
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	10.0 %		₹ 123.01
	TOTAL				₹ 1,353.13
	Add for Sundries and contingencies	@	3.0 %		₹ 40.59
	TOTAL				₹ 1,393.73
	Add for water charges & electricity	@	1.5 %		₹ 20.91
	TOTAL				₹ 1,414.63
	Add 15% for contractor's profit and overheads	@	15%		₹ 212.19
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 1,626.83
	Say				₹ 1,626.80
19.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :				
19.81.12	600 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 100 metres				
	MATERIAL:				
	Quantity of bleaching powder for this item shall be 1/3 rd the Qty. of bleaching powder as calculated for the pipes of different diameters in Item no.18.80				
	For 600 mm dia = $42411.60/3 = 14137.20$ gm or 0.1414 q.				
19001	Bleaching powder	quintal	0.1414	₹ 2,400.00	₹ 339.36
	Labour:				
0216	Foreman	Day	0.550	₹ 425.00	₹ 233.75
0215	Fitter (grade-I)	Day	1.200	₹ 380.00	₹ 456.00
0212	Helper	Day	1.200	₹ 300.00	₹ 360.00
	TOTAL				₹ 1,389.11
	Add for Pumps, temporary pipe arrangement to supply water and remove the same and expenses for testing & carriage of materials etc.	@	10.50 %		₹ 145.86
	TOTAL				₹ 1,534.97
	Add for Sundries and contingencies	@	3.0 %		₹ 46.05
	TOTAL				₹ 1,581.02
	Add for water charges & electricity	@	1.5 %		₹ 23.72
	TOTAL				₹ 1,604.73

	Add 15% for contractor's profit and overheads	@	15%		₹ 240.71
	Extra Cost of disinfecting C.I water pipe for 100.00 mtr. Length for one operation				₹ 1,845.44
	Say				₹ 1,845.40
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.1	80 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	0.406	₹ 480.00	₹ 194.88
02004	Kerosene oil	litre	0.415	₹ 48.00	₹ 19.92
	Labour:				
	For excavation & refilling				
0203	Belder	Day	12.000	₹ 300.00	₹ 3,600.00
0212	Coolie	Day	12.000	₹ 300.00	₹ 3,600.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.200	₹ 425.00	₹ 85.00
0215	Fitter gr-I	Day	1.950	₹ 380.00	₹ 741.00
0212	Helper	Day	1.950	₹ 300.00	₹ 585.00
	TOTAL				₹ 8,825.80
	Add for carriage of materials, Chisels, Heater etc.	@	1.75 %		₹ 154.45
	TOTAL				₹ 8,980.25
	Add for Sundries and contingencies	@	3.0 %		₹ 269.41
	TOTAL				₹ 9,249.66
	Add for water charges	@	1 %		₹ 92.50
	TOTAL				₹ 9,342.16
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,401.32
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 10,743.48
	Rate per mtr.				₹ 244.61
	Say				₹ 244.60
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.2	100 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	0.51	₹ 480.00	₹ 244.80
02004	Kerosene oil	litre	0.415	₹ 48.00	₹ 19.92
	Labour:				
	For excavation & refilling				
0203	Belder	Day	12.000	₹ 300.00	₹ 3,600.00
0212	Coolie	Day	12.000	₹ 300.00	₹ 3,600.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.300	₹ 425.00	₹ 127.50
0215	Fitter gr-I	Day	2.250	₹ 380.00	₹ 855.00
0212	Helper	Day	2.250	₹ 300.00	₹ 675.00
	TOTAL				₹ 9,122.22

	Add for carriage of materials, Chisels, Heater etc.	@	2.0 %		₹ 182.44
	TOTAL				₹ 9,304.66
	Add for Sundries and contingencies	@	3.0 %		₹ 279.14
	TOTAL				₹ 9,583.80
	Add for water charges	@	1 %		₹ 95.84
	TOTAL				₹ 9,679.64
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,451.95
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 11,131.59
	Rate per mtr.				₹ 253.45
	Say				₹ 253.50
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.3	125 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	0.61	₹ 480.00	₹ 292.80
02004	Kerosene oil	litre	0.62	₹ 48.00	₹ 29.76
	Labour:				
	For excavation & refilling				
0203	Belder	Day	12.000	₹ 300.00	₹ 3,600.00
0212	Coolie	Day	12.000	₹ 300.00	₹ 3,600.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.350	₹ 425.00	₹ 148.75
0215	Fitter gr-I	Day	2.550	₹ 380.00	₹ 969.00
0212	Helper	Day	2.550	₹ 300.00	₹ 765.00
	TOTAL				₹ 9,405.31
	Add for carriage of materials, Chisels, Heater etc.	@	2.25 %		₹ 211.62
	TOTAL				₹ 9,616.93
	Add for Sundries and contingencies	@	3.0 %		₹ 288.51
	TOTAL				₹ 9,905.44
	Add for water charges	@	1 %		₹ 99.05
	TOTAL				₹ 10,004.49
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,500.67
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 11,505.17
	Rate per mtr.				₹ 261.96
	Say				₹ 262.00
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.4	150 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	0.715	₹ 480.00	₹ 343.20
02004	Kerosene oil	litre	0.62	₹ 48.00	₹ 29.76
	Labour:				
	For excavation & refilling				
0203	Belder	Day	11.500	₹ 300.00	₹ 3,450.00

0212	Coolie	Day	11.500	₹ 300.00	₹ 3,450.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.400	₹ 425.00	₹ 170.00
0215	Fitter gr-I	Day	2.850	₹ 380.00	₹ 1,083.00
0212	Helper	Day	2.850	₹ 300.00	₹ 855.00
	TOTAL				₹ 9,380.96
	Add for carriage of materials, Chisels, Heater etc.	@	2.50 %		₹ 234.52
	TOTAL				₹ 9,615.48
	Add for Sundries and contingencies	@	3.0 %		₹ 288.46
	TOTAL				₹ 9,903.95
	Add for water charges	@	1 %		₹ 99.04
	TOTAL				₹ 10,002.99
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,500.45
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 11,503.44
	Rate per mtr.				₹ 261.92
	Say				₹ 261.90
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.5	200 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	0.920	₹ 480.00	₹ 441.60
02004	Kerosene oil	litre	0.8265	₹ 48.00	₹ 39.67
	Labour:				
	For excavation & refilling				
0203	Belder	Day	12.000	₹ 300.00	₹ 3,600.00
0212	Coolie	Day	12.000	₹ 300.00	₹ 3,600.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.400	₹ 425.00	₹ 170.00
0215	Fitter gr-I	Day	3.400	₹ 380.00	₹ 1,292.00
0212	Helper	Day	3.400	₹ 300.00	₹ 1,020.00
	TOTAL				₹ 10,163.27
	Add for carriage of materials, Chisels, Heater etc.	@	3.0 %		₹ 304.90
	TOTAL				₹ 10,468.17
	Add for Sundries and contingencies	@	3.0 %		₹ 314.05
	TOTAL				₹ 10,782.22
	Add for water charges	@	1 %		₹ 107.82
	TOTAL				₹ 10,890.04
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,633.51
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 12,523.54
	Rate per mtr.				₹ 285.14
	Say				₹ 285.10
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.6	250 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				

	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	1.150	₹ 480.00	₹ 552.00
02004	Kerosene oil	litre	1.25	₹ 48.00	₹ 60.00
	Labour:				
	For excavation & refilling				
0203	Belder	Day	12.250	₹ 300.00	₹ 3,675.00
0212	Coolie	Day	12.250	₹ 300.00	₹ 3,675.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.450	₹ 425.00	₹ 191.25
0215	Fitter gr-I	Day	4.000	₹ 380.00	₹ 1,520.00
0212	Helper	Day	4.000	₹ 300.00	₹ 1,200.00
	TOTAL				₹ 10,873.25
	Add for carriage of materials, Chisels, Heater etc.	@	3.25 %		₹ 353.38
	TOTAL				₹ 11,226.63
	Add for Sundries and contingencies	@	3.0 %		₹ 336.80
	TOTAL				₹ 11,563.43
	Add for water charges	@	1 %		₹ 115.63
	TOTAL				₹ 11,679.06
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,751.86
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 13,430.92
	Rate per mtr.				₹ 305.80
	Say				₹ 305.80
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.7	300 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	1.250	₹ 480.00	₹ 600.00
02004	Kerosene oil	litre	1.65	₹ 48.00	₹ 79.20
	Labour:				
	For excavation & refilling				
0203	Belder	Day	12.600	₹ 300.00	₹ 3,780.00
0212	Coolie	Day	12.600	₹ 300.00	₹ 3,780.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.500	₹ 425.00	₹ 212.50
0215	Fitter gr-I	Day	4.500	₹ 380.00	₹ 1,710.00
0212	Helper	Day	4.500	₹ 300.00	₹ 1,350.00
	TOTAL				₹ 11,511.70
	Add for carriage of materials, Chisels, Heater etc.	@	3.25 %		₹ 374.13
	TOTAL				₹ 11,885.83
	Add for Sundries and contingencies	@	3.0 %		₹ 356.57
	TOTAL				₹ 12,242.41
	Add for water charges	@	1 %		₹ 122.42
	TOTAL				₹ 12,364.83
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,854.72
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 14,219.55
	Rate per mtr.				₹ 323.76
	Say				₹ 323.80

19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.8	350 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	1.350	₹ 480.00	₹ 648.00
02004	Kerosene oil	litre	1.7	₹ 48.00	₹ 81.60
	Labour:				
	For excavation & refilling				
0203	Belder	Day	12.750	₹ 300.00	₹ 3,825.00
0212	Coolie	Day	12.750	₹ 300.00	₹ 3,825.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.600	₹ 425.00	₹ 255.00
0215	Fitter gr-I	Day	5.500	₹ 380.00	₹ 2,090.00
0212	Helper	Day	5.500	₹ 300.00	₹ 1,650.00
	TOTAL				₹ 12,374.60
	Add for carriage of materials, Chisels, Heater etc.	@	3.25 %		₹ 402.17
	TOTAL				₹ 12,776.77
	Add for Sundries and contingencies	@	3.0 %		₹ 383.30
	TOTAL				₹ 13,160.08
	Add for water charges	@	1 %		₹ 131.60
	TOTAL				₹ 13,291.68
	Add 15% for contractor's profit and overheads	@	15%		₹ 1,993.75
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 15,285.43
	Rate per mtr.				₹ 348.03
	Say				₹ 348.00
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.9	400 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	1.450	₹ 480.00	₹ 696.00
02004	Kerosene oil	litre	2.00	₹ 48.00	₹ 96.00
	Labour:				
	For excavation & refilling				
0203	Belder	Day	12.850	₹ 300.00	₹ 3,855.00
0212	Coolie	Day	12.850	₹ 300.00	₹ 3,855.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.700	₹ 425.00	₹ 297.50
0215	Fitter gr-I	Day	5.650	₹ 380.00	₹ 2,147.00
0212	Helper	Day	5.650	₹ 300.00	₹ 1,695.00
	TOTAL				₹ 12,641.50
	Add for carriage of materials, Chisels, Heater etc.	@	4.0 %		₹ 505.66
	TOTAL				₹ 13,147.16
	Add for Sundries and contingencies	@	3.0 %		₹ 394.41
	TOTAL				₹ 13,541.57
	Add for water charges	@	1 %		₹ 135.42
	TOTAL				₹ 13,676.99

	Add 15% for contractor's profit and overheads	@	15%		₹ 2,051.55
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 15,728.54
	Rate per mtr.				₹ 358.12
	Say				₹ 358.10
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.10	450 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	1.500	₹ 480.00	₹ 720.00
02004	Kerosene oil	litre	2.50	₹ 48.00	₹ 120.00
	Labour:				
	For excavation & refilling				
0203	Belder	Day	14.000	₹ 300.00	₹ 4,200.00
0212	Coolie	Day	14.000	₹ 300.00	₹ 4,200.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.750	₹ 425.00	₹ 318.75
0215	Fitter gr-I	Day	6.250	₹ 380.00	₹ 2,375.00
0212	Helper	Day	6.250	₹ 300.00	₹ 1,875.00
	TOTAL				₹ 13,808.75
	Add for carriage of materials, Chisels, Heater etc.	@	4.25 %		₹ 586.87
	TOTAL				₹ 14,395.62
	Add for Sundries and contingencies	@	3.0 %		₹ 431.87
	TOTAL				₹ 14,827.49
	Add for water charges	@	1 %		₹ 148.27
	TOTAL				₹ 14,975.77
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,246.36
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 17,222.13
	Rate per mtr.				₹ 392.13
	Say				₹ 392.10
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.11	500 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	1.650	₹ 480.00	₹ 792.00
02004	Kerosene oil	litre	2.90	₹ 48.00	₹ 139.20
	Labour:				
	For excavation & refilling				
0203	Belder	Day	15.250	₹ 300.00	₹ 4,575.00
0212	Coolie	Day	15.250	₹ 300.00	₹ 4,575.00
	For cutting joints lead and making blocks and stacking				
0216	Foreman	Day	0.900	₹ 425.00	₹ 382.50
0215	Fitter gr-I	Day	6.750	₹ 380.00	₹ 2,565.00
0212	Helper	Day	6.750	₹ 300.00	₹ 2,025.00
	TOTAL				₹ 15,053.70
	Add for carriage of materials, Chisels, Heater etc.	@	5.25 %		₹ 790.32

	TOTAL				₹ 15,844.02
	Add for Sundries and contingencies	@	3.0 %		₹ 475.32
	TOTAL				₹ 16,319.34
	Add for water charges	@	1 %		₹ 163.19
	TOTAL				₹ 16,482.53
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,472.38
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 18,954.91
	Rate per mtr.				₹ 431.58
	Say				₹ 431.60
19.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead upto 50 metre :				
19.82.12	600 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	MATERIAL:				
	Consider dismantling C.I pipes for 12 x 3.66=43.92 mtr. or 12 joints.				
11016	Fuel wood required	quintal	1.850	₹ 480.00	₹ 888.00
02004	Kerosene oil	litre	3.75	₹ 48.00	₹ 180.00
	Labour:				
	For excavation & refilling				
0212	Belder	Day	17.750	₹ 300.00	₹ 5,325.00
0212	Coolie	Day	17.750	₹ 300.00	₹ 5,325.00
	For cutting joints lead and making blocks and stacking				
0215	Foreman	Day	1.000	₹ 380.00	₹ 380.00
0212	Fitter gr-I	Day	8.000	₹ 300.00	₹ 2,400.00
0212	Helper	Day	8.000	₹ 300.00	₹ 2,400.00
	TOTAL				₹ 16,898.00
	Add for carriage of materials, Chisels, Heater etc.	@	6.50 %		₹ 1,098.37
	TOTAL				₹ 17,996.37
	Add for Sundries and contingencies	@	3.0 %		₹ 539.89
	TOTAL				₹ 18,536.26
	Add for water charges	@	1 %		₹ 185.36
	TOTAL				₹ 18,721.62
	Add 15% for contractor's profit and overheads	@	15%		₹ 2,808.24
	Cost of dismantling C.I pipes for 43.92 mtr.				₹ 21,529.87
	Rate per mtr.				₹ 490.21
	Say				₹ 490.20
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.1	80 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	0.150	₹ 300.00	₹ 45.00
	TOTAL				₹ 45.00
	Add for cost of replacement of blades of steel saw etc.	@	10 %		₹ 4.50
	TOTAL				₹ 49.50
	Add for Sundries and contingencies	@	3.0 %		₹ 1.49
	TOTAL				₹ 50.99
	Add for water charges	@	1 %		₹ 0.51
	TOTAL				₹ 51.49
	Add 15% for contractor's profit and overheads	@	15%		₹ 7.72

	Rate per cutting				₹ 59.22
	Say				₹ 59.20
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.2	100 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	0.200	₹ 300.00	₹ 60.00
	TOTAL				₹ 60.00
	Add for cost of replacement of blades of steel saw etc.	@	11 %		₹ 6.60
	TOTAL				₹ 66.60
	Add for Sundries and contingencies	@	3.0 %		₹ 2.00
	TOTAL				₹ 68.60
	Add for water charges	@	1 %		₹ 0.69
	TOTAL				₹ 69.28
	Add 15% for contractor's profit and overheads	@	15%		₹ 10.39
	Rate per cutting				₹ 79.68
	Say				₹ 79.70
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.3	125 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	0.275	₹ 300.00	₹ 82.50
	TOTAL				₹ 82.50
	Add for cost of replacement of blades of steel saw etc.	@	11.25 %		₹ 9.28
	TOTAL				₹ 91.78
	Add for Sundries and contingencies	@	3.0 %		₹ 2.75
	TOTAL				₹ 94.53
	Add for water charges	@	1 %		₹ 0.95
	TOTAL				₹ 95.48
	Add 15% for contractor's profit and overheads	@	15%		₹ 14.32
	Rate per cutting				₹ 109.80
	Say				₹ 109.80
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.4	150 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	0.375	₹ 300.00	₹ 112.50
	TOTAL				₹ 112.50
	Add for cost of replacement of blades of steel saw etc.	@	11.5 %		₹ 12.94
	TOTAL				₹ 125.44
	Add for Sundries and contingencies	@	3.0 %		₹ 3.76
	TOTAL				₹ 129.20
	Add for water charges	@	1 %		₹ 1.29
	TOTAL				₹ 130.49
	Add 15% for contractor's profit and overheads	@	15%		₹ 19.57

	Rate per cutting				₹ 150.07
	Say				₹ 150.10
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.5	200 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	0.500	₹ 300.00	₹ 150.00
	TOTAL				₹ 150.00
	Add for cost of replacement of blades of steel saw etc.	@	10.5 %		₹ 15.75
	TOTAL				₹ 165.75
	Add for Sundries and contingencies	@	3.0 %		₹ 4.97
	TOTAL				₹ 170.72
	Add for water charges	@	1 %		₹ 1.71
	TOTAL				₹ 172.43
	Add 15% for contractor's profit and overheads	@	15%		₹ 25.86
	Rate per cutting				₹ 198.29
	Say				₹ 198.30
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.6	250 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	0.625	₹ 300.00	₹ 187.50
	TOTAL				₹ 187.50
	Add for cost of replacement of blades of steel saw etc.	@	9.5 %		₹ 17.81
	TOTAL				₹ 205.31
	Add for Sundries and contingencies	@	3.0 %		₹ 6.16
	TOTAL				₹ 211.47
	Add for water charges	@	1 %		₹ 2.11
	TOTAL				₹ 213.59
	Add 15% for contractor's profit and overheads	@	15%		₹ 32.04
	Rate per cutting				₹ 245.62
	Say				₹ 245.60
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.7	300 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	0.750	₹ 300.00	₹ 225.00
	TOTAL				₹ 225.00
	Add for cost of replacement of blades of steel saw etc.	@	9.25 %		₹ 20.81
	TOTAL				₹ 245.81
	Add for Sundries and contingencies	@	3.0 %		₹ 7.37
	TOTAL				₹ 253.19
	Add for water charges	@	1 %		₹ 2.53
	TOTAL				₹ 255.72
	Add 15% for contractor's profit and overheads	@	15%		₹ 38.36

	Rate per cutting				₹ 294.08
	Say				₹ 294.10
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.8	350 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	0.875	₹ 300.00	₹ 262.50
	TOTAL				₹ 262.50
	Add for cost of replacement of blades of steel saw etc.	@	9.0 %		₹ 23.63
	TOTAL				₹ 286.13
	Add for Sundries and contingencies	@	3.0 %		₹ 8.58
	TOTAL				₹ 294.71
	Add for water charges	@	1 %		₹ 2.95
	TOTAL				₹ 297.66
	Add 15% for contractor's profit and overheads	@	15%		₹ 44.65
	Rate per cutting				₹ 342.30
	Say				₹ 342.30
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.9	400 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	1.000	₹ 300.00	₹ 300.00
	TOTAL				₹ 300.00
	Add for cost of replacement of blades of steel saw etc.	@	10.0 %		₹ 30.00
	TOTAL				₹ 330.00
	Add for Sundries and contingencies	@	3.0 %		₹ 9.90
	TOTAL				₹ 339.90
	Add for water charges	@	1 %		₹ 3.40
	TOTAL				₹ 343.30
	Add 15% for contractor's profit and overheads	@	15%		₹ 51.49
	Rate per cutting				₹ 394.79
	Say				₹ 394.80
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.10	450 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	1.125	₹ 300.00	₹ 337.50
	TOTAL				₹ 337.50
	Add for cost of replacement of blades of steel saw etc.	@	10.25 %		₹ 34.59
	TOTAL				₹ 372.09
	Add for Sundries and contingencies	@	3.0 %		₹ 11.16
	TOTAL				₹ 383.26
	Add for water charges	@	1 %		₹ 3.83
	TOTAL				₹ 387.09
	Add 15% for contractor's profit and overheads	@	15%		₹ 58.06
	Rate per cutting				₹ 445.15
	Say				₹ 445.20

19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.11	500 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	1.250	₹ 300.00	₹ 375.00
	TOTAL				₹ 375.00
	Add for cost of replacement of blades of steel saw etc.	@	10.5 %		₹ 39.38
	TOTAL				₹ 414.38
	Add for Sundries and contingencies	@	3.0 %		₹ 12.43
	TOTAL				₹ 426.81
	Add for water charges	@	1 %		₹ 4.27
	TOTAL				₹ 431.07
	Add 15% for contractor's profit and overheads	@	15%		₹ 64.66
	Rate per cutting				₹ 495.74
	Say				₹ 495.70
19.83	Labour for cutting C.I. pipe with steel saw.				
19.83.12	600 mm diameter C.I. pipe.				
Code	Description	Unit	Quantity	Rate	Amount
	Detail of cost for one cut.				
	Labour:				
0212	Helper	Day	1.500	₹ 300.00	₹ 450.00
	TOTAL				₹ 450.00
	Add for cost of replacement of blades of steel saw etc.	@	9.25 %		₹ 41.63
	TOTAL				₹ 491.63
	Add for Sundries and contingencies	@	3.0 %		₹ 14.75
	TOTAL				₹ 506.37
	Add for water charges	@	1 %		₹ 5.06
	TOTAL				₹ 511.44
	Add 15% for contractor's profit and overheads	@	15%		₹ 76.72
	Rate per cutting				₹ 588.15
	Say				₹ 588.20
19.84	Providing & fixing chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology				
19.84.1	15 mm nominal bore				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one no.				
	Materials:				
19254	15 mm Battery Based Sensor Pillar Cock	each	1.00	₹ 5,800.00	₹ 5,800.00
	TOTAL				₹ 5,800.00
	Add for carriage of materials and fixing charges etc.	@	1.0%		₹ 58.00
	TOTAL				₹ 5,858.00
	Add for Sundries and contingencies	@	3.0%		₹ 175.74
	TOTAL				₹ 6,033.74
	Add 15% for contractor's profit and overheads		15%		₹ 905.06
	Cost of one no. battery based infrared sensor operated pillar cock				₹ 6,938.80
	Say				₹ 6,940.00

S U B - H E A D - 2 0



S E W A G E A N D D R A I N A G E

SUB HEAD : 20.0 / SEWAGE AND DRAINAGE

BASIC RATES

Code No	Description	Unit	Rate
0203	Belder	Day	₹ 300.00
0205	Bhisti/Waterman	Day	₹ 300.00
0207	Blacksmith 2nd Class	Day	₹ 380.00
0212	Coolie/Helper	Day	₹ 300.00
0219	Mason (brick layer) 1st class	Day	₹ 425.00
0220	Mason (brick layer) 2nd class	Day	₹ 380.00
0221	Mason (for ornamental stone work) 1st class	Day	₹ 425.00
0222	Mason (for plain stone work) 2nd class	Day	₹ 380.00
	Carriage		
0406	Bricks	1000 Nos	₹ 332.82
0404	Brick/ Stone aggregate 40 mm nominal size and above	cum	₹ 172.74
0421	Cement	tonne	₹ 110.94
0447	S.W. pipes 100 mm dia	100 metre	₹ 170.68
0448	S.W. pipes 150 mm dia	100 metre	₹ 332.82
0449	S.W. pipes 200 mm dia	100 metre	₹ 554.70
0450	S.W. pipes 230 mm dia	100 metre	₹ 792.42
0451	S.W. pipes 250 mm dia	100 metre	₹ 950.90
0452	S.W. pipes 300 mm dia	100 metre	₹ 1,188.63
0425	Fine Sand	cum	₹ 142.63
0435	R.C.C. pipes 100 mm dia	100 metre	₹ 272.80
0439	R.C.C. pipes 150 mm dia	100 metre	₹ 454.67
0440	R.C.C. pipes 250 mm dia	100 metre	₹ 1,049.23
0441	R.C.C. pipes 300 mm dia	100 metre	₹ 1,299.05
0442	R.C.C. pipes 450 & 500 mm dia	100 metre	₹ 3,031.11
0443	R.C.C. pipes 600, 700, 750 & 800 mm dia	100 metre	₹ 4,546.68
0444	R.C.C. pipes 900 mm dia	100 metre	₹ 6,820.02
0436	R.C.C. pipes 1000 mm dia	100 metre	₹ 9,093.35

0437	R.C.C. pipes 1100 mm dia	100 metre	₹ 9,093.35
0438	R.C.C. pipes 1200 mm dia	100 metre	₹ 9,093.35
	Materials		
20001	Rectangular cover 455x610 mm with frame (low duty)	each	₹ 2,000.00
20002	Rectangular cover 455x610mm without frame (low duty)	each	₹ 1,200.00
20003	500 mm dia cover without frame (medium duty)	each	₹ 3,000.00
20004	R.C.C. pipes NP2 class 100 mm dia	metre	₹ 388.00
20005	R.C.C. pipes NP2 class 150 mm dia	metre	₹ 443.00
20006	R.C.C. pipes NP2 class 250 mm dia	metre	₹ 516.00
20007	R.C.C. pipes NP2 class 300 mm dia	metre	₹ 750.00
20008	R.C.C. pipes NP2 class 450 mm dia	metre	₹ 1,525.00
20009	R.C.C. pipes NP2 class 500 mm dia	metre	₹ 1,624.00
20010	R.C.C. pipes NP2 class 600 mm dia	metre	₹ 2,196.00
20011	R.C.C. pipes NP2 class 700 mm dia	metre	₹ 2,493.00
20012	R.C.C. pipes NP2 class 800 mm dia	metre	₹ 2,899.00
20013	R.C.C. pipes NP2 class 900 mm dia	metre	₹ 3,534.00
20014	R.C.C. pipes NP2 class 1000 mm dia	metre	₹ 4,438.00
20015	R.C.C. pipes NP2 class 1100 mm dia	metre	₹ 5,355.00
20016	R.C.C. pipes NP2 class 1200 mm dia	metre	₹ 5,573.00
20017	R.C.C. collarsNP2 class 100 mm dia	each	₹ 56.00
20018	R.C.C. collarsNP2 class 150 mm dia	each	₹ 72.00
20019	R.C.C. collarsNP2 class 250 mm dia	each	₹ 117.00
20020	R.C.C. collarsNP2 class 300 mm dia	each	₹ 145.00
20021	R.C.C. collarsNP2 class 450 mm dia	each	₹ 353.00
20022	R.C.C. collarsNP2 class 500 mm dia	each	₹ 410.00
20023	R.C.C. collarsNP2 class 600 mm dia	each	₹ 514.00
20024	R.C.C. collarsNP2 class 700 mm dia	each	₹ 521.00
20025	R.C.C. collarsNP2 class 800 mm dia	each	₹ 746.00
20026	R.C.C. collarsNP2 class 900 mm dia	each	₹ 910.00
20027	R.C.C. collarsNP2 class 1000 mm dia	each	₹ 932.00
20028	R.C.C. collarsNP2 class 1100 mm dia	each	₹ 1,069.00

20029	R.C.C. collarsNP2 class 1200 mm dia	each	₹ 1,242.00
20030	Stoneware pipes grade A (60 cm long) 100 mm dia	each	₹ 54.00
20031	Stoneware pipes grade A (60 cm long) 150 mm dia	each	₹ 70.00
20032	Stoneware pipes grade A (60 cm long) 200 mm dia	each	₹ 128.00
20033	Stoneware pipes grade A (60 cm long) 230 mm dia	each	₹ 134.00
20034	Stoneware pipes grade A (60 cm long) 250 mm dia	each	₹ 183.00
20035	Stoneware pipes grade A (60 cm long) 300 mm dia	each	₹ 262.00
20036	Spun yarn	kilogram	₹ 48.00
20037	560 mm dia cover without frame (Heavy duty)	each	₹ 5,908.00
20038	Brick Aggregate (Single size) : 63 mm nominal size	cum	₹ 2,500.00
20039	Brick bats (mix class)	cum	₹ 1,950.00
20040	Brick Aggregate (Single size) : 50 to 80 mm nominal size (mix class)	cum	₹ 2,180.00
20041	Brick Aggregate (Single size) : 40 mm nominal size (mix class)	cum	₹ 2,240.00
06002	2nd Class Bricks	1000 Nos	₹ 6,690.00
04001	Brick Aggregate (Single size) : 40 mm nominal size	cum	₹ 2,550.00
03001	Portland Cement	tonne	₹ 6,100.00
02003	Fine sand (zone IV)	cum	₹ 370.00
05039	Mild steel round bar above 12 mm dia	quintal	₹ 4,010.00
05042	Mild steel square bars	quintal	₹ 4,140.00

SUB HEAD : 20.0					
SEWAGE AND DRAINAGE					
20.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete :				
20.1.1	100 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 metre				
	MATERIALS				
1854	(i) 100 mm stone ware pipes 60 cm long	each	55	₹ 54.00	₹ 2,970.00
2224	(ii) Carriage of pipes	100m.	33.00	₹ 170.68	₹ 56.32
	Added 10% allowance for breakage in items (I) & (II)				
0367	Cement of 50 joints = 0.019 tonne	tonne	0.019	₹ 6,100.00	₹ 115.90
2209	Carriage of cement	tonne	0.019	₹ 110.94	₹ 2.11
0983	Fine sand	cum	0.01	₹ 370.00	₹ 3.70
2261	Carriage of fine sand	cum	0.01	₹ 142.63	₹ 1.43
1881	Spun yarn or plain gaskin @ 0.09 kg per joint	kilogram	4.50	₹ 48.00	₹ 216.00
	= 0.09 x 50 = 4.50 kg				
	LABOUR				
0219	Mason (brick layer) 1st class	Day	1.00	₹ 425.00	₹ 425.00
0222	Mason (for plain stone work) 2nd class	Day	1.00	₹ 380.00	₹ 380.00
0203	Belder	Day	3.00	₹ 300.00	₹ 900.00
0205	Bhisti/Waterman	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 5,370.46
	Add 1 % for water charges				₹ 53.70
	TOTAL				₹ 5,424.16
	Add 3% for contingencies				₹ 162.72
	TOTAL				₹ 5,586.88
	Add 15% for contractor's profit and overheads				₹ 838.03
	Cost for 30 metre				₹ 6,424.91
	Cost for 1 metre				₹ 214.16
	Say				₹ 214.20
20.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete :				
20.1.2	150 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 metre				
	MATERIALS				
1855	(i) 150 mn stone. ware pipes 60 cm long	each	55.00	₹ 70.00	₹ 3,850.00
2225	(ii) Carriage of pipes	100m.	33.00	₹ 332.82	₹ 109.83
	Added 10% allowance for breakage in items (i) & (ii)				
0367	Cement of 50 joints = 0.036 tonne	tonne	0.036	₹ 6,100.00	₹ 219.60
2209	Carriage of cement	tonne	0.036	₹ 110.94	₹ 3.99
0983	Fine sand	cum	0.019	₹ 370.00	₹ 7.03
2261	Carriage of fine sand	cum	0.019	₹ 142.63	₹ 2.71
1881	Spun yarn or plain gaskin @ 0.18 kg per joint	kilogram	9.00	₹ 48.00	₹ 432.00
	= 0.18x50 = 9 kg				
	LABOUR				
0219	Mason (brick layer) 1st class	Day	1.50	₹ 425.00	₹ 637.50
0222	Mason (for plain stone work) 2nd class	Day	1.50	₹ 380.00	₹ 570.00
0203	Beldar	Day	4.00	₹ 300.00	₹ 1,200.00

0205	Bhishti	Day	1.00	₹ 300.00	₹ 300.00
	TOTAL				₹ 7,332.66
	Add 1 % for water charges				₹ 73.33
	TOTAL				₹ 7,405.99
	Add 3% for contingencies				₹ 222.18
	TOTAL				₹ 7,628.17
	Add 15% for contractor's profit and overheads				₹ 1,144.23
	Cost for 30 metre				₹ 8,772.40
	Cost for 1 metre				₹ 292.41
	Say				₹ 292.40
20.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete :				
20.1.3	200 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 metre				
	MATERIALS				
1856	(i) 200 mm stone ware pipes 60 cm long	each	55.00	₹ 128.00	₹ 7,040.00
0449	(ii) Carriage of pipes	100m.	33.00	₹ 554.70	₹ 183.05
	Added 10% allowance for breakage in items (i) & (ii)				
0367	Cement of 50 joints = 0.053 tonne	tonne	0.053	₹ 6,100.00	₹ 323.30
2209	Carriage of cement	tonne	0.053	₹ 110.94	₹ 5.88
983	Fine sand	cum	0.028	₹ 370.00	₹ 10.36
2261	Carriage of fine sand	cum	0.028	₹ 142.63	₹ 3.99
1881	Spun yarn or plain gaskin @ 0.24 kg per joint	Kilogram	12.00	₹ 48.00	₹ 576.00
	= 0.24 x 50 = 12.00 kg				
	LABOUR				
0219	Mason (brick layer) 1st class	Day	1.75	₹ 425.00	₹ 743.75
0222	Mason (for plain stone work) 2nd class	Day	1.75	₹ 380.00	₹ 665.00
0203	Beldar	Day	4.50	₹ 300.00	₹ 1,350.00
0205	Bhishti	Day	1.75	₹ 300.00	₹ 525.00
	TOTAL				₹ 11,426.33
	Add 1 % for water charges				₹ 114.26
	TOTAL				₹ 11,540.59
	Add 3% for contingencies				₹ 346.22
	TOTAL				₹ 11,886.81
	Add 15% for contractor's profit and overheads				₹ 1,783.02
	Cost for 30 metre				₹ 13,669.83
	Cost for 1 metre				₹ 455.66
	Say				₹ 455.70
20.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete :				
20.1.4	230 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 metre				
	MATERIALS				
1857	(i) 230 mm stone wacgpipes 60 cm long	each	55.00	₹ 134.00	₹ 7,370.00
2227	(ii) Carriage of pipes	100m.	33.00	₹ 792.42	₹ 261.50
	Added 10% allowance for breakage in items (I) & (ii)				
0367	Cement of 50 joints = 0.065 tonne	tonne	0.065	₹ 6,100.00	₹ 396.50
2209	Carriage of cement	tonne	0.065	₹ 110.94	₹ 7.21
0983	Fine sand	cum	0.036	₹ 370.00	₹ 13.32
2261	Carriage of fine sand	cum	0.036	₹ 142.63	₹ 5.13

1881	Spun yarn or plain gaskin @ 0.27 kg per joint	kilogram	13.50	₹ 48.00	₹ 648.00
	= 0.27 x 50 =13.50 kg				
	LABOUR				
0219	Mason (brick layer) 1st class	Day	2.00	₹ 425.00	₹ 850.00
0222	Mason (for plain stone work) 2nd class	Day	2.00	₹ 380.00	₹ 760.00
0203	Beldar	Day	5.00	₹ 300.00	₹ 1,500.00
0205	Bhishti	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 12,261.66
	Add 1% for water charges				₹ 122.62
	TOTAL				₹ 12,384.28
	Add 3% for contingencies				₹ 371.53
	TOTAL				₹ 12,755.81
	Add 15% for contractor's profit and overheads				₹ 1,913.37
	Cost for 30 metre				₹ 14,669.18
	Cost for 1 metre				₹ 488.97
Say					₹ 489.00
20.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete :				
20.1.5	250 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 metre				
	MATERIALS				
1858	(i) 250 mm stone ware pipes 60 cm long	each.	55	₹ 183.00	₹ 10,065.00
2228	(ii) Carriage of pipes	100m.	33.00	₹ 950.90	₹ 313.80
	Added 10% allowance for breakage in items (i) & (ii)				
0367	Cement of 50 joints = 0.094 tonne	tonne	0.094	₹ 6,100.00	₹ 573.40
2209	Carriage of cement	tonne	0.094	₹ 110.94	₹ 10.43
0983	Fine sand	cum	0.05	₹ 370.00	₹ 18.50
2261	Carriage of fine sand	cum	0.05	₹ 142.63	₹ 7.13
1881	Spun yarn or plain gaskin @ 0.30 kg per joint	kilogram	15.00	₹ 48.00	₹ 720.00
	= 0.30x50= 15.00 kg				
	LABOUR				
0219	Mason (brick layer) 1st class	Day	2.25	₹ 425.00	₹ 956.25
0222	Mason (for plain stone work) 2nd class	Day	2.25	₹ 380.00	₹ 855.00
0203	Beldar	Day	5.50	₹ 300.00	₹ 1,650.00
0205	Bhishti	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 15,619.51
	Add 1 % for water charges				₹ 156.20
	TOTAL				₹ 15,775.71
	Add 3% for contingencies				₹ 473.27
	TOTAL				₹ 16,248.98
	Add 15% for contractor's profit and overheads				₹ 2,437.35
	Cost for 30 metre				₹ 18,686.33
	Cost for 1 metre				₹ 622.88
	Say				₹ 622.90
20.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete :				
20.1.6	300 mm diameter				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 30 metre				
	MATERIALS				
1859	(i) 300mm stoneware pipes 60 cm long	each	55.00	₹ 262.00	₹ 14,410.00
2229	(ii) Carriage of pipes	100m.	33.00	₹ 1,188.63	₹ 392.25
	Added 10% allowance for breakage in items (i) & (ii)				
0367	Cement of 50 joints = 0.125 tonne	tonne	0.125	₹ 6,100.00	₹ 762.50
2209	Carriage of cement	tonne	0.125	₹ 110.94	₹ 13.87
0983	Fine sand	cum	0.075	₹ 370.00	₹ 27.75
2261	Carriage of fine sand	cum	0.075	₹ 142.63	₹ 10.70
1881	Spun yarn or plain gaskin	kilogram	18.00	₹ 48.00	₹ 864.00
	= 0.30x50 =15.00 kg				
	LABOUR				
0219	Mason (brick layer) 1st class	Day	2.50	₹ 425.00	₹ 1,062.50
0222	Mason (for plain stone work) 2nd class	Day	2.50	₹ 380.00	₹ 950.00
0203	Beldar	Day	6.00	₹ 300.00	₹ 1,800.00
0205	Bhishti	Day	1.50	₹ 300.00	₹ 450.00
	TOTAL				₹ 20,743.57
	Add 1 % for water charges				₹ 207.44
	TOTAL				₹ 20,951.01
	Add 3% for contingencies				₹ 628.53
	TOTAL				₹ 21,579.54
	Add15% for contractor's profit and overheads				₹ 3,236.93
	Cost for 30 metre				₹ 24,816.47
	Cost for 1 metre				₹ 827.22
	Say				₹ 827.20
20.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) around S.W. pipes including bed concrete as per standard design:				
20.2.1	100 mm diameter S. W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	Area = $W \times (W/2) + \frac{1}{2} \times (\pi/4 \times W^2) - (\pi/4 \times d^2)$				
	= $W^2 \times \{A^{1/2} + \frac{1}{2} \times (\pi/4)\} - (\pi/4 \times d^2)$				
	Where W = D + X				
	D = 100 + 12 + 12 = 124 mm or 12.4 cm				
	X = 300 mm as trench depth is less than 1200 mm				
	Area = $(30.0 + 12.4)^2 (0.5 + \pi \times \frac{1}{8}) - \pi/4 \times (12.4)^2$				
	= $(42.4)^2 (0.5 + \pi/8) - \pi/4 \times (12.4)^2$				
	= $(1797.76) (0.89) - 0.7854 \times 153.76$				
	= $1600.01 - 120.76 = 1479.2$ sq.cm.				
	= 0.1479 sqm Say 0.148 sqm				
	For 10 m length qty. of concrete reqd. = 1.48 cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	1.48	₹ 6,207.70	₹ 9,187.40
	Cost of 10 metres				₹ 9,187.40
	Cost per metre				₹ 918.74
	Say				₹ 918.70
20.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) around S.W. pipes including bed concrete as per standard design:				
20.2.2	150 mm diameter S.W. pipe				

Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	$\text{Area} = W \times (W/2) + \frac{1}{2} \times (\pi/4 \times W^2) - (\pi/4 \times d^2)$				
	$= W^2 \times \{A^{1/2} + \frac{1}{2} \times (\pi/4)\} - (\pi/4 \times d^2)$				
	Where $W = D + X$				
	$D = 150 + 16 + 16 = 182 \text{ mm or } 18.2 \text{ cm}$				
	$X = 300 \text{ mm as trench depth is less than } 1200 \text{ mm}$				
	$\text{Area} = (30.0 + 18.2)^2 (0.5 + \pi \times \frac{1}{8}) - \pi/4 \times (18.2)^2$				
	$= (48.2)^2 (0.5 + \pi/8) - \pi/4 \times (18.2)^2$				
	$= (2323.24) (0.89) - 260.02$				
	$= 2067.68 - 260.02 = 1807.66 \text{ sq.cm.}$				
	$= 0.1808 \text{ sqm Say } 0.181 \text{ sqm}$				
	For 10 m length qty. of concrete reqd. = 1.81 cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	1.81	₹ 6,207.70	₹ 11,235.94
	Cost of 10 metres				₹ 11,235.94
	Cost per metre				₹ 1,123.59
	Say				₹ 1,123.60
20.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) around S.W. pipes including bed concrete as per standard design:				
20.2.3	200 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	$\text{Area} = W \times (W/2) + \frac{1}{2} \times (\pi/4 \times W^2) - (\pi/4 \times d^2)$				
	$= W^2 \times \{A^{1/2} + \frac{1}{2} \times (\pi/4)\} - (\pi/4 \times d^2)$				
	Where $W = D + X$				
	$D = 200 + 17 + 17 = 234 \text{ mm or } 23.40 \text{ cm}$				
	$X = 300 \text{ mm as trench depth is less than } 1200 \text{ mm}$				
	$\text{Area} = (30.0 + 23.4)^2 (0.5 + \pi \times \frac{1}{8}) - \pi/4 \times (23.4)^2$				
	$= (53.4)^2 (0.5 + \pi/8) - \pi/4 \times (23.4)^2$				
	$= (2851.56) (0.89) - 429.83$				
	$= 2537.89 - 429.83 = 2108.06 \text{ sq.cm.}$				
	$= 0.2108 \text{ sqm Say } 0.211 \text{ sqm}$				
	For 10 m length qty. of concrete reqd. = 2.11 cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	2.11	₹ 6,207.70	₹ 13,098.25
	Cost of 10 metres				₹ 13,098.25
	Cost per metre				₹ 1,309.83
	Say				₹ 1,309.80
20.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) around S.W. pipes including bed concrete as per standard design:				
20.2.4	230 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	$\text{Area} = W \times (W/2) + \frac{1}{2} \times (\pi/4 \times W^2) - (\pi/4 \times d^2)$				
	$= W^2 \times \{A^{1/2} + \frac{1}{2} \times (\pi/4)\} - (\pi/4 \times d^2)$				
	Where $W = D + X$				
	$D = 230 + 19 + 19 = 268 \text{ mm or } 26.8 \text{ cm}$				
	$X = 300 \text{ mm as trench depth is less than } 1200 \text{ mm}$				
	$\text{Area} = (30.0 + 26.8)^2 (0.5 + \pi \times \frac{1}{8}) - \pi/4 \times (26.8)^2$				
	$= (56.8)^2 (0.5 + \pi/8) - \pi/4 \times (26.8)^2$				
	$= (2871.35) (0.89) - 563.82$				
	$= 2871.35 - 563.82 = 2307.53 \text{ sq.cm.}$				

	= 0.2308 sqm Say 0.231 sqm				
	For 10 m length qty. of concrete reqd. = 2.31 cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	2.31	₹ 6,207.70	₹ 14,339.79
	Cost of 10 metres				₹ 14,339.79
	Cost per metre				₹ 1,433.98
	Say				₹ 1,434.00
20.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) around S.W. pipes including bed concrete as per standard design:				
20.2.5	250 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	Area = $W \times (W/2) + \frac{1}{2} \times (\pi/4 \times W^2) - (\pi/4 \times d^2)$				
	= $W^2 \times \{A^{\frac{1}{2}} + \frac{1}{2} \times (\pi/4)\} - (\pi/4 \times d^2)$				
	Where $W = D + X$				
	$D = 250 + 20 + 20 = 290$ mm or 29.0 cm				
	$X = 300$ mm as trench depth is less than 1200 mm				
	Area = $(30.0 + 29.0)^2 (0.5 + \pi \times \frac{1}{8}) - \pi/4 \times (29.0)^2$				
	= $(59.0)^2 (0.5 + \pi/8) - \pi/4 \times (29.0)^2$				
	= $(3481.00) (0.89) - 660.18$				
	= $3098.09 - 660.18 = 2437.90$ sq.cm.				
	= 0.24379 sqm Say 0.244 sqm				
	For 10 m length qty. of concrete reqd. = 2.44 cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	2.44	₹ 6,207.70	₹ 15,146.79
	Cost of 10 metres				₹ 15,146.79
	Cost per metre				₹ 1,514.68
	Say				₹ 1,514.70
20.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design :				
20.3.1	100 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre length pipe				
	Area = $W \times DI + 2 \times \frac{1}{2} \times R \cot Q \times R - [R^2/2(\pi/2-Q)] - (\pi/2)R^2$				
	= $WDI + R^2(\cot Q) - R^2(\pi/2 - Q) - (\pi/2)R^2$				
	= $WDI + R^2(\cot Q - \pi + Q)$				
	Where $\sin Q = [R / (W/2)] = 2R/W$				
	$W = D + X$; $X = 300$ mm, $D = 100 + 12 + 12 = 124$ mm				
	$W = 124 + 300 = 424$ mm				
	$D1 = \text{Depth} = 100 + (\frac{1}{2} \times 124) = 162$ mm				
	$R = 62$ mm				
	$\sin Q = (2 \times 62)/424 = 0.292$ therefore $Q = 17^\circ 0'$				
	Hence $\tan Q = 0.3057$				
	Area = $424 \times 162 + (62)^2 (\cot Q - \pi + Q)$				
	= $[68688 + 3844 (1/0.3057 - 180^\circ + 17^\circ 0')]$ sqmm				
	= $[68688 + 3844 (3.27 - 163^\circ 0' \times \pi/180)]$ sqmm				
	= $(68688 + 3844 \times 0.43)$ sqmm				
	= $(68688 + 1652.92)$ sqmm = 70340.92 sqmm				
	Say 70341 sqmm or 0.070341 sqm				
	For 10 m length qty. of concrete reqd. = $0.07034 \times 10 = 0.7034$ cum				

	Rate as per item no 4.1.8 of SH : Concrete work	cum	0.70	₹ 6,207.70	₹ 4,366.50
	Cost of 10 metres				₹ 4,366.50
	Cost per metre				₹ 436.65
	Say				₹ 436.70
20.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design :				
20.3.2	150 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre length pipe				
	Area = $W \times DI + 2 \times \frac{1}{2} \times R \cot Q \times R - [R^2/2(\pi/2-Q)] - (\pi/2)R^2$				
	= $WD1 + R^2(\cot Q) - R^2(\pi/2 - Q) - (\pi/2)R^2$				
	= $WDI + R^2(\cot Q - \pi + Q)$				
	Where $\sin Q = [R / (W/2)] = 2R/W$				
	$W = D + X$; $X = 300 \text{ mm}$, $D = 150 + 16 + 16 = 182 \text{ mm}$				
	$W = 182 + 300 = 482 \text{ mm}$				
	$D1 = \text{Depth} = 150 + (\frac{1}{2} \times 182) = 241 \text{ mm}$				
	$R = 91 \text{ mm}$				
	$\sin Q = (2 \times 91) / 482 = 0.3776$ therefore $Q = 22^\circ 12'$				
	Hence $\tan Q = 0.4081$				
	Area = $482 \times 241 + (91)^2 (\cot Q - \pi + Q)$				
	= $[116162 + 8281 (1/0.4081 - 180^\circ + 22^\circ 12')]$ sqmm				
	= $[116162 + 8281 (2.45 - 157^\circ 48' \times 3.14/180)]$ sqmm				
	= $[116162 + 8281 \times (2.45 - 2.75)]$ sqmm				
	= $[116162 + 8281 \times (-0.30)]$ sqmm				
	= $(116162 - 2484.3)$ sqmm = 113677.7 sqmm				
	Say 113677.7 sqmm or 0.1136777 sqm				
	For 10 m length qty. of concrete reqd. = $0.1136777 \times 10 = 1.136777 \text{ cum}$				
	Say 1.14 Cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	1.14	₹ 6,207.70	₹ 7,076.78
	Cost of 10 metres				₹ 7,076.78
	Cost per metre				₹ 707.68
	Say				₹ 707.70
20.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design :				
20.3.3	200 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre length pipe				
	Area = $W \times DI + 2 \times \frac{1}{2} \times R \cot Q \times R - [R^2/2(\pi/2-Q)] - (\pi/2)R^2$				
	= $WD1 + R^2(\cot Q) - R^2(\pi/2 - Q) - (\pi/2)R^2$				
	= $WDI + R^2(\cot Q - \pi + Q)$				
	Where $\sin Q = [R / (W/2)] = 2R/W$				
	$W = D + X$; $X = 300 \text{ mm}$, $D = 200 + 17 + 17 = 234 \text{ mm}$				
	$W = 234 + 300 = 534 \text{ mm}$				
	$D1 = \text{Depth} = 150 + (\frac{1}{2} \times 234) = 267 \text{ mm}$				
	$R = 117 \text{ mm}$				
	$\sin Q = (2 \times 117) / 534 = 0.4382$ therefore $Q = 26^\circ 0'$				
	Hence $\tan Q = 0.4877$				
	Area = $534 \times 267 + (117)^2 (\cot Q - \pi + Q)$				

	= [142578 + 13689 (1/0.4877-180° + 26°0')] sqmm				
	= [142578 + 13689 (2.05-180°0' x 3.14/180)] sqmm				
	= [142578 + 13689 x (2.05-2.69)] sqmm				
	= [142578 + 13689 x (-0.64)] sqmm				
	= (142578 - 8760.96) sqmm = 133817.04 sqmm				
	Say 133817 sqmm or 0.134 sqm				
	For 10 m length qty. of concrete reqd. = 0.134 x 10 = 1.34 cum				
	Say 1.34 Cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	1.34	₹ 6,207.70	₹ 8,318.32
	Cost of 10 metres				₹ 8,318.32
	Cost per metre				₹ 831.83
	Say				₹ 831.80
20.3:	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design :				
20.3.4:	230 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre length pipe				
	Area = $W \times DI + 2 \times \frac{1}{2} \times R \cot Q \times R - \left[\frac{R^2}{2}(\pi/2 - Q) \right] - (\pi/2)R^2$				
	= $WDI + R^2(\cot Q) - R^2(\pi/2 - Q) - (\pi/2)R^2$				
	= $WDI + R^2(\cot Q - \pi + Q)$				
	Where $\sin Q = [R / (W/2)] = 2R/W$				
	$W = D + X$; $X = 300$ mm, $D = 230 + 19 + 19 = 268$ mm				
	$W = 268 + 300 = 568$ mm				
	$D1 = \text{Depth} = 150 + (\frac{1}{2} \times 268) = 284$ mm				
	$R = 134$ mm				
	$\sin Q = (2 \times 134) / 568 = 0.47183$ therefore $Q = 28^\circ 9'$				
	Hence $\tan Q = 0.5351$				
	Area = $568 \times 284 + (134)^2 (\cot Q - \pi + Q)$				
	= [161312 + 17956 (1/0.5351-180° + 28°9')] sqmm				
	= [161312 + 17956 (1.87-151°51' x 3.14/180)] sqmm				
	= [161312 + 17956 x (1.87-2.65)] sqmm				
	= [161312 + 17956 x (-0.78)] sqmm				
	= (161312 - 14005.68) sqmm = 147306 sqmm				
	Say 147306 sqmm or 0.147 sqm				
	For 10 m length qty. of concrete reqd. = 0.147 x 10 = 1.47 cum				
	Say 1.47 Cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	1.47	₹ 6,207.70	₹ 9,125.32
	Cost of 10 metres				₹ 9,125.32
	Cost per metre				₹ 912.53
	Say				₹ 912.50
20.3:	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design :				
20.3.5:	250 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre length pipe				
	Area = $W \times DI + 2 \times \frac{1}{2} \times R \cot Q \times R - \left[\frac{R^2}{2}(\pi/2 - Q) \right] - (\pi/2)R^2$				

	$= WD1 + R^2(\cot Q) - R^2(\pi/2 - Q) - (\pi/2)R^2$				
	$= WDI + R^2(\cot Q - \pi + Q)$				
	Where $\sin Q = [R / (W/2)] = 2R/W$				
	$W = D + X$; $X = 300$ mm, $D = 250 + 20 + 20 = 290$ mm				
	$W = 290 + 300 = 590$ mm				
	$D1 = \text{Depth} = 150 + (\frac{1}{2} \times 290) = 295$ mm				
	$R = 145$ mm				
	$\sin Q = (2 \times 145) / 590 = 0.49154$ therefore $Q = 29^\circ 26'$				
	Hence $\tan Q = 0.5635$				
	$\text{Area} = 590 \times 295 + (145)^2 (\cot Q - \pi + Q)$				
	$= [174050 + 21025 (1/0.5635 - 180^\circ + 29^\circ 26')]$ sqmm				
	$= [174050 + 21025 (1.77 - 150^\circ 34' \times 3.14/180)]$ sqmm				
	$= [174050 + 21025 \times (1.77 - 2.63)]$ sqmm				
	$= [174050 + 21025 \times (-0.86)]$ sqmm				
	$= (174050 - 18081.5)$ sqmm = 155968.5 sqmm				
	Say 155968 sqmm or 0.156 sqm				
	For 10 m length qty. of concrete reqd. $= 0.156 \times 10 = 1.56$ cum				
	Say 1.56 Cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	1.56	₹ 6,207.70	₹ 9,684.01
	Cost of 10 metres				₹ 9,684.01
	Cost per metre				₹ 968.40
	Say				₹ 968.40
20.3:	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design :				
20.3.6:	300 mm diameter S.W. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre length pipe				
	$\text{Area} = W \times D1 + 2 \times \frac{1}{2} \times R \cot Q \times R - [R^2/2(\pi/2 - Q)] - (\pi/2)R^2$				
	$= WD1 + R^2(\cot Q) - R^2(\pi/2 - Q) - (\pi/2)R^2$				
	$= WDI + R^2(\cot Q - \pi + Q)$				
	Where $\sin Q = [R / (W/2)] = 2R/W$				
	$W = D + X$; $X = 300$ mm, $D = 300 + 25 + 25 = 350$ mm				
	$W = 350 + 300 = 650$ mm				
	$D1 = \text{Depth} = 150 + (\frac{1}{2} \times 350) = 325$ mm				
	$R = 175$ mm				
	$\sin Q = (2 \times 175) / 650 = 0.5385$ therefore $Q = 32^\circ 34'$				
	Hence $\tan Q = 0.6387$				
	$\text{Area} = 650 \times 325 + (175)^2 (\cot Q - \pi + Q)$				
	$= [211250 + 30625 (1/0.6387 - 180^\circ + 32^\circ 34')]$ sqmm				
	$= [211250 + 30625 (1.566 - 147^\circ 26' \times 3.14/180)]$ sqmm				
	$= [211250 + 30625 \times (1.566 - 2.571)]$ sqmm				
	$= [211250 + 30625 \times (-1.005)]$ sqmm				
	$= (211250 - 30778.13)$ sqmm = 180471.87 sqmm				
	Say 180472 sqmm or 0.180 sqm				
	For 10 m length qty. of concrete reqd. $= 0.180 \times 10 = 1.80$ cum				
	Say 1.80 Cum				
	Rate as per item no 4.1.8 of SH : Concrete work	cum	1.80	₹ 6,207.70	₹ 11,173.86

	Cost of 10 metres				₹ 11,173.86
	Cost per metre				₹ 1,117.39
	Say				₹ 1,117.40
20.4:	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:				
20.4.1:	100 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	LABOUR				
0203	Beldar	Day	0.49	₹ 300.00	₹ 147.00
0212	coolie	Day	0.36	₹ 300.00	₹ 108.00
	TOTAL				₹ 255.00
	Add 1% for water charges				₹ 2.55
	TOTAL				₹ 257.55
	Add 3% for contingencies				₹ 7.73
	TOTAL				₹ 265.28
	Add 15% for contractor's profit and overheads				₹ 39.79
	Cost for 10 metre				₹ 305.07
	Cost for 1 metre				₹ 30.51
	Say				₹ 30.50
20.4:	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:				
20.4.2:	150 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	LABOUR				
0203	Beldar	Day	0.49	₹ 300.00	₹ 147.00
0212	coolie	Day	0.45	₹ 300.00	₹ 135.00
	TOTAL				₹ 282.00
	Add 1 % for water charges				₹ 2.82
	TOTAL				₹ 284.82
	Add 3% for contingencies				₹ 8.54
	TOTAL				₹ 293.36
	Add 15% for contractor's profit and overheads				₹ 44.00
	Cost for 10 metre				₹ 337.36
	Cost for 1 metre				₹ 33.74
	Say				₹ 33.70
20.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:				
20.4.3	200 mm diameter				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	LABOUR				
0203	Beldar	Day	0.49	₹ 300.00	₹ 147.00
0212	Coolie	Day	0.51	₹ 300.00	₹ 153.00
	TOTAL				₹ 300.00
	Add 1% for water charges				₹ 3.00

	TOTAL				₹	303.00
	Add 3% for contingencies				₹	9.09
	TOTAL				₹	312.09
	Add 15% for contractor's profit and overheads				₹	46.81
	Cost for 10 metre				₹	358.90
	Cost for 1 metre				₹	35.89
	Say				₹	35.90
20.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:					
20.4.4	230 mm diameter					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	LABOUR					
0203	Beldar	Day	0.49	₹ 300.00	₹	147.00
0212	Collie	Day	0.54	₹ 300.00	₹	162.00
	TOTAL				₹	309.00
	Add 1% for water charges				₹	3.09
	TOTAL				₹	312.09
	Add 3% for contingencies				₹	9.36
	TOTAL				₹	321.45
	Add 15% for contractor's profit and overheads				₹	48.22
	Cost for 10 metre				₹	369.67
	Cost for 1 metre				₹	36.97
	Say				₹	37.00
20.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:					
20.4.5	250 mm diameter					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	LABOUR					
0203	Beldar	Day	0.49	₹ 300.00	₹	147.00
0212	Coolie	Day	0.57	₹ 300.00	₹	171.00
	TOTAL				₹	318.00
	Add 1% for water charges				₹	3.18
	TOTAL				₹	321.18
	Add 3% for contingencies				₹	9.64
	TOTAL				₹	330.82
	Add 15% for contractor's profit and overheads				₹	49.62
	Cost for 10 metre				₹	380.44
	Cost for 1 metre				₹	38.04
	Say				₹	38.00
20.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:					
20.4.6	300 mm diameter					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	LABOUR					
0203	Beldar	Day	0.49	₹ 300.00	₹	147.00
0212	Coolie	Day	0.63	₹ 300.00	₹	189.00
	TOTAL				₹	336.00

	Add 1 % for water charges				₹	3.36
	TOTAL				₹	339.36
	Add 3% for contingencies				₹	10.18
	TOTAL				₹	349.54
	Add 15% for contractor's profit and overheads				₹	52.43
	Cost for 10 metre				₹	401.97
	Cost for 1 metre				₹	40.20
	Say				₹	40.20
20.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:					
20.4.7	350 mm diameter					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	LABOUR					
0203	Beldar	Day	0.60	₹ 300.00	₹	180.00
0212	Coolie	Day	0.69	₹ 300.00	₹	207.00
	TOTAL				₹	387.00
	Add 1 % for water charges				₹	3.87
	TOTAL				₹	390.87
	Add 3% for contingencies				₹	11.73
	TOTAL				₹	402.60
	Add 15% for contractor's profit and overheads				₹	60.39
	Cost for 10 metre				₹	462.99
	Cost for 1 metre				₹	46.30
	Say				₹	46.30
20.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:					
20.4.8	400 mm diameter					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	LABOUR					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Coolie	Day	0.75	₹ 300.00	₹	225.00
	TOTAL				₹	423.00
	Add 1 % for water charges				₹	4.23
	TOTAL				₹	427.23
	Add 3% for contingencies				₹	12.82
	TOTAL				₹	440.05
	Add 15% for contractor's profit and overheads				₹	66.01
	Cost for 10 metre				₹	506.06
	Cost for 1 metre				₹	50.61
	Say				₹	50.60
20.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:					
20.4.9	450 mm diameter					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	LABOUR					
0203	Beldar	Day	0.66	₹ 300.00	₹	198.00
0212	Coolie	Day	0.81	₹ 300.00	₹	243.00
	TOTAL				₹	441.00
	Add 1 % for water charges				₹	4.41

	TOTAL				₹	445.41
	Add 3% for contingencies				₹	13.36
	TOTAL				₹	458.77
	Add 15% for contractor's profit and overheads				₹	68.82
	Cost for 10 metre				₹	527.59
	Cost for 1 metre				₹	52.76
	Say				₹	52.80
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete					
20.5.1	100 mm dia. R.C.C. pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	MATERIALS					
20004	100 mm dia pipe (in 2 m. length = 5 nos.)	metre	10.00	₹ 388.00	₹	3,880.00
20017	Collars 5 Nos.	each	5	₹ 56.00	₹	280.00
0435	carriage of pipes	100 metre	10.00	₹ 272.80	₹	27.28
03001	Cement of 5 joints = $5 \times 0.00065 = 0.00325$ cum = 0.0048 t	tonne	0.005	₹ 6,100.00	₹	30.50
	say 0.005 tonne					
0421	Carriage of cement	tonne	0.005	₹ 110.94	₹	0.55
02003	Fine sand for 5 joint = $0.0013 \times 5 = 0.0065$ cum	cum	0.006	₹ 370.00	₹	2.22
	= 0.006 cum					
0425	Carriage of sand	cum	0.006	₹ 142.63	₹	0.86
	LABOUR					
0219	Mason 1st class	Day	0.32	₹ 425.00	₹	136.00
0220	Mason 2nd class	Day	0.32	₹ 380.00	₹	121.60
0203	Beldar	Day	0.63	₹ 300.00	₹	189.00
0205	Bhishti	Day	0.16	₹ 300.00	₹	48.00
	TOTAL				₹	4,716.01
	Add 1 % for water charges				₹	47.16
	TOTAL				₹	4,763.17
	Add 3% for contingencies				₹	142.90
	TOTAL				₹	4,906.07
	Add 15% for contractor's profit and overheads				₹	735.91
	Cost for 10 metre				₹	5,641.98
	Cost for 1 metre				₹	564.20
	Say				₹	564.20
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete					
20.5.2	150mm dia. R.C.C. pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	MATERIALS					
20005	150 mm dia pipe (in 2 m. length = 5 nos.)	metre	10.00	₹ 443.00	₹	4,430.00
20018	Collars 5 Nos.	each	5	₹ 72.00	₹	360.00
0439	carriage of pipes	100metre	10.00	₹ 454.67	₹	45.47
03001	Cement of 5 joints = $5 \times 0.0008 = 0.004$ cum = 0.006 tonne	tonne	0.006	₹ 6,100.00	₹	36.60
0421	Carriage of cement	tonne	0.006	₹ 110.94	₹	0.67
02003	Fine sand for 5 joint = $0.0016 \times 5 = 0.008$ cum	cum	0.008	₹ 370.00	₹	2.96
0425	Carriage of sand	cum	0.008	₹ 142.63	₹	1.14
	LABOUR					
0219	Mason 1 st class	Day	0.39	₹ 425.00	₹	165.75

0220	Mason 2nd class	Day	0.39	₹ 380.00	₹ 148.20
0203	Beldar	Day	0.78	₹ 300.00	₹ 234.00
0205	Bhishti	Day	0.16	₹ 300.00	₹ 48.00
	TOTAL				₹ 5,472.79
	Add 1 % for water charges				₹ 54.73
	TOTAL				₹ 5,527.52
	Add 3% for contingencies				₹ 165.83
	TOTAL				₹ 5,693.35
	Add 15% for contractor's profit and overheads				₹ 854.00
	Cost for 10 metre				₹ 6,547.35
	Cost for 1 metre				₹ 654.74
	Say				₹ 654.70
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.3	250 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20006	250 mm dia pipe (in 2 m. length = 5 nos.)	metre	10.00	₹ 516.00	₹ 5,160.00
20019	Collars 5 Nos.	each	5.00	₹ 117.00	₹ 585.00
0440	carriage of pipes	100metre	10.00	₹ 1,049.23	₹ 104.92
03001	Cement of 5 joints = $5 \times 0.0012 = 0.006$ cum = 0.009 tonne	tonne	0.009	₹ 6,100.00	₹ 54.90
0421	Carriage of cement	tonne	0.009	₹ 110.94	₹ 1.00
02003	Fine sand for 5 joint = $0.0024 \times 5 = 0.012$ cum	cum	0.012	₹ 370.00	₹ 4.44
0425	Carriage of sand	cum	0.012	₹ 142.63	₹ 1.71
	LABOUR				
0219	Mason 1st class	Day	0.54	₹ 425.00	₹ 229.50
0220	Mason 2nd class	Day	0.54	₹ 380.00	₹ 205.20
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhishti	Day	0.23	₹ 300.00	₹ 69.00
	TOTAL				₹ 6,865.67
	Add 1 % for water charges				₹ 68.66
	TOTAL				₹ 6,934.33
	Add 3% for contingencies				₹ 208.03
	TOTAL				₹ 7,142.36
	Add 15% for contractor's profit and overheads				₹ 1,071.35
	Cost for 10 metre				₹ 8,213.71
	Cost for 1 metre				₹ 821.37
	Say				₹ 821.40
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.4	300 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20007	300 mm dia pipe (in 2.5 m. length = 4 nos.)	metre	10.00	₹ 750.00	₹ 7,500.00
20020	Collars 4 Nos.	each	4.00	₹ 145.00	₹ 580.00
0441	carriage of pipes	100 metre	10.00	₹ 1,299.05	₹ 129.91
03001	Cement of 4 joints = $4 \times 0.00185 = 0.0074$ cum = 0.011 tonne	tonne	0.011	₹ 6,100.00	₹ 67.10
0421	Carriage of cement	tonne	0.011	₹ 110.94	₹ 1.22
02003	Fine sand for 4 joint = $0.0037 \times 4 = 0.0148$, say 0.015 cum	cum	0.015	₹ 370.00	₹ 5.55

0425	Carriage of sand	cum	0.015	₹ 142.63	₹ 2.14
	LABOUR				
0219	Mason 1st class	Day	0.59	₹ 425.00	₹ 250.75
0220	Mason 2nd class	Day	0.59	₹ 380.00	₹ 224.20
0203	Beldar	Day	1.16	₹ 300.00	₹ 348.00
0205	Bhishti	Day	0.20	₹ 300.00	₹ 60.00
	TOTAL				₹ 9,168.87
	Add 1 % for water charges				₹ 91.69
	TOTAL				₹ 9,260.56
	Add 3% for contingencies				₹ 277.82
	TOTAL				₹ 9,538.38
	Add 15% for contractor's profit and overheads				₹ 1,430.76
	Cost for 10 metre				₹ 10,969.14
	Cost for 1 metre				₹ 1,096.91
	Say				₹ 1,096.90
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.5	450 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20008	450 mmdiampe (in 2.5 m. length = 4 nos.)	metre	10.00	₹ 1,525.00	₹ 15,250.00
20021	Collars 4 Nos.	each	4.00	₹ 353.00	₹ 1,412.00
0442	carriag of pipes	100 metre	10.00	₹ 3,031.11	₹ 303.11
03001	Cement of 4 joints = 4 x 0.0041 = 0.0164 cum = 0.024 t	tonne	0.024	₹ 6,100.00	₹ 146.40
0421	Carriage of cement	tonne	0.024	₹ 110.94	₹ 2.66
02003	Fine sand for 4 joint = 0.0082 x 4 = 0.033 cum	cum	0.033	₹ 370.00	₹ 12.21
0425	Carriage of sand	cum	0.033	₹ 142.63	₹ 4.71
	LABOUR				
0219	Mason 1st class	Day	0.75	₹ 425.00	₹ 318.75
0220	Mason 2nd class	Day	0.75	₹ 380.00	₹ 285.00
0203	Beldar	Day	1.50	₹ 300.00	₹ 450.00
0205	Bhishti	Day	0.33	₹ 300.00	₹ 99.00
	TOTAL				₹ 18,283.84
	Add 1 % for water charges				₹ 182.84
	TOTAL				₹ 18,466.68
	Add 3% for contingencies				₹ 554.00
	TOTAL				₹ 19,020.68
	Add 15% for contractor's profit and overheads				₹ 2,853.10
	Cost for 10 metre				₹ 21,873.78
	Cost for 1 metre				₹ 2,187.38
	Say				₹ 2,187.40

20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.6	500 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20009	500 mm dia pipe (in 2.5 m. length = 4)	metre	10.00	₹ 1,624.00	₹ 16,240.00
20022	Collars 4 Nos.	each	4.00	₹ 410.00	₹ 1,640.00
0442	carriage of pipe	100 metre	10.00	₹ 3,031.11	₹ 303.11
03001	Cement of 4 joints = $4 \times 0.00185 = 0.0074 \text{ cum} = 0.011 \text{ t}$	tonne	0.026	₹ 6,100.00	₹ 158.60
0421	Carriage of cement	tonne	0.026	₹ 110.94	₹ 2.88
02003	Fine sand for 4 joint = $0.0037 \times 4 = 0.0148 \text{ cum} = 0.015 \text{ cum}$	cum	0.036	₹ 370.00	₹ 13.32
0425	Carriage of sand	cum	0.036	₹ 142.63	₹ 5.13
	LABOUR				
0219	Mason 1 st class	Day	0.81	₹ 425.00	₹ 344.25
0220	Mason 2nd class	Day	0.81	₹ 380.00	₹ 307.80
0203	Beldar	Day	1.62	₹ 300.00	₹ 486.00
0205	Bhishti	Day	0.33	₹ 300.00	₹ 99.00
	TOTAL				₹ 19,600.09
	Add 1 % for water charges				₹ 196.00
	TOTAL				₹ 19,796.09
	Add 3% for contingencies				₹ 593.88
	TOTAL				₹ 20,389.97
	Add 15% for contractor's profit and overheads				₹ 3,058.50
	Cost for 10 metre				₹ 23,448.47
	Cost for 1 metre				₹ 2,344.85
	Say				₹ 2,344.90
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.7	600 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20010	600mm dia pipe (in 2.5 m. length = 4 nos.)	metre	10.00	₹ 2,196.00	₹ 21,960.00
20023	Collars 4 Nos	each	4.00	₹ 514.00	₹ 2,056.00
0443	carriage of pipes	100 metre	10.00	₹ 4,546.68	₹ 454.67
03001	Cement of 4 joints = $4 \times 0.0054 = 0.0216 \text{ cum} = 0.032 \text{ tonne}$		0.032	₹ 6,100.00	₹ 195.20
0421	Carriage of cement	tonne	0.032	₹ 110.94	₹ 3.55
02003	Fine sand for 4 joint = $0.0108 \times 4 = 0.043 \text{ cum}$	cum	0.043	₹ 370.00	₹ 15.91
0425	Carriage of sand	cum	0.043	₹ 142.63	₹ 6.13
	LABOUR				
0219	Mason 1 st class	Day	0.92	₹ 425.00	₹ 391.00
0220	Mason 2nd class	Day	0.92	₹ 380.00	₹ 349.60
0203	Beldar	Day	1.83	₹ 300.00	₹ 549.00

0205	Bhishti	Day	0.33	₹ 300.00	₹ 99.00
	TOTAL				₹ 26,080.06
	Add 1 % for water charges				₹ 260.80
	TOTAL				₹ 26,340.86
	Add 3% for contingencies				₹ 790.23
	TOTAL				₹ 27,131.09
	Add 15% for contractor's profit and overheads				₹ 4,069.66
	Cost for 10 metre				₹ 31,200.75
	Cost for 1 metre				₹ 3,120.08
	Say				₹ 3,120.10
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.8	700 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20011	700 mm dia pipe (in 2.5 m. length = 4 nos.)	metre	10.00	₹ 2,493.00	₹ 24,930.00
20024	Collars 4 Nos	each	4.00	₹ 521.00	₹ 2,084.00
0443	carriage of pipes	100 meire	10.00	₹ 4,546.68	₹ 454.67
03001	Cement of 4 joints = 4 x 0.0062 = 0.0248 cum = 0.037 t	tonne	0.037	₹ 6,100.00	₹ 225.70
0421	Carriage of cement	tonne	0.037	₹ 110.94	₹ 4.10
02003	Fine sand for 4 joint = 0.0124 x 4 = 0.0496 cum= 0.05 cum	cum	0.05	₹ 370.00	₹ 18.50
0425	Carriage of sand	cum	0.05	₹ 142.63	₹ 7.13
	LABOUR				
0219	Mason 1 st class	Day	1.03	₹ 425.00	₹ 437.75
0220	Mason 2nd class	Day	1.03	₹ 380.00	₹ 391.40
0203	Beldar	Day	2.06	₹ 300.00	₹ 618.00
0205	Bhishti	Day	0.42	₹ 300.00	₹ 126.00
	TOTAL				₹ 29,297.25
	Add 1 % for water charges				₹ 292.97
	TOTAL				₹ 29,590.22
	Add 3% for contingencies				₹ 887.71
	TOTAL				₹ 30,477.93
	Add 15% for contractor's profit and overheads				₹ 4,571.69
	Cost for 10 metre				₹ 35,049.62
	Cost for 1 metre				₹ 3,504.96
	Say				₹ 3,505.00
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.9	800 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20012	800 mm dia pipe (in 2.5 m. length = 4 nos.)	metre	10.00	₹ 2,899.00	₹ 28,990.00
20025	Collars 4 Nos.	each	4.00	₹ 746.00	₹ 2,984.00
0443	carriage of pipes	100 metre	10.00	₹ 4,546.68	₹ 454.67
03001	Cement of 4 joints = 4 x 0.0072 = 0.0288 cum = 0.042 t	tonne	0.042	₹ 6,100.00	₹ 256.20
0421	Carriage of cement	tonne	0.042	₹ 110.94	₹ 4.66
02003	Fine sand for 4 joint = 0.0143 x 4 = 0.0572 cum = 0.057 cum	cum	0.057	₹ 370.00	₹ 21.09
0425	Carriage of sand	cum	0.057	₹ 142.63	₹ 8.13
	LABOUR				
0219	Mason 1st class	Day	1.14	₹ 425.00	₹ 484.50
0220	Mason 2nd class	Day	1.14	₹ 380.00	₹ 433.20
0203	Beldar	Day	2.28	₹ 300.00	₹ 684.00
0205	Bhishti	Day	0.42	₹ 300.00	₹ 126.00
	TOTAL				₹ 34,446.45

	Add 1 % for water charges				₹	344.46
	TOTAL				₹	34,790.91
	Add 3% for contingencies				₹	1,043.73
	TOTAL				₹	35,834.64
	Add 15% for contractor's profit and overheads				₹	5,375.20
	Cost for 10 metre				₹	41,209.84
	Cost for 1 metre				₹	4,120.98
	Say				₹	4,121.00
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete					
20.5.10	900 mm dia. R.C.C. pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	MATERIALS					
20013	900 mm dia pipe (in 2.5 m. length = 4 nos.)	metre	10.00	₹ 3,534.00	₹	35,340.00
20026	Collars 4 Nos.	each	4.00	₹ 910.00	₹	3,640.00
0444	Carriage of pipes	100 metre	10.00	₹ 6,820.02	₹	682.00
03001	Cement of 4 joints = $4 \times 0.0082 = 0.0328 \text{ cum} = 0.049 \text{ t}$	tonne	0.049	₹ 6,100.00	₹	298.90
0421	Carriage of cement	tonne	0.049	₹ 110.94	₹	5.44
02003	Fine sand for 4 joint = $0.0164 \times 4 = 0.066 \text{ cum}$	cum	0.66	₹ 370.00	₹	244.20
0425	Carriage of sand	cum	0.66	₹ 142.63	₹	94.14
	LABOUR					
0219	Mason 1 st class	Day	1.25	₹ 425.00	₹	531.25
0220	Mason 2nd class	Day	1.25	₹ 380.00	₹	475.00
0203	Beldar	Day	3.00	₹ 300.00	₹	900.00
0205	Bhishti	Day	0.50	₹ 300.00	₹	150.00
	TOTAL				₹	42,360.93
	Add 1 % for water charges				₹	423.61
	TOTAL				₹	42,784.54
	Add 3% for contingencies				₹	1,283.54
	TOTAL				₹	44,068.08
	Add 15% for contractor's profit and overheads				₹	6,610.21
	Cost for 10 metre				₹	50,678.29
	Cost for 1 metre				₹	5,067.83
	Say				₹	5,067.80
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete					
20.5.11	1000 mm dia. R.C.C. pipe					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for 10 metre					
	MATERIALS					
20014	1000 mm dia pipe (in 2.5 m. length = 4 nos.)	metre	10.00	₹ 4,438.00	₹	44,380.00
20027	Collars 4 Nos.	each	4.00	₹ 932.00	₹	3,728.00
0436	Carriage of pipes	100 metre	10.00	₹ 9,093.35	₹	909.34
03001	Cement of 4 joints = $4 \times 0.0092 = 0.0368 \text{ cum} = 0.055 \text{ t}$	tonne	0.055	₹ 6,100.00	₹	335.50
0421	Carriage of cement	tonne	0.055	₹ 110.94	₹	6.10
02003	Fine sand for 4 joint = $0.0185 \times 4 = 0.074 \text{ cum}$	cum	0.074	₹ 370.00	₹	27.38
0425	Carriage of sand	cum	0.074	₹ 142.63	₹	10.55
	LABOUR					
0219	Mason 1 st class	Day	1.36	₹ 425.00	₹	578.00
0220	Mason 2nd class	Day	1.36	₹ 380.00	₹	516.80
0203	Beldar	Day	4.33	₹ 300.00	₹	1,299.00

0205	Bhishti	Day	0.50	₹ 300.00	₹ 150.00
	TOTAL				₹ 51,940.67
	Add 1 % for water charges				₹ 519.41
	TOTAL				₹ 52,460.08
	Add 3% for contingencies				₹ 1,573.80
	TOTAL				₹ 54,033.88
	Add 15% for contractor's profit and overheads				₹ 8,105.08
	Cost for 10 metre				₹ 62,138.96
	Cost for 1 metre				₹ 6,213.90
	Say				₹ 6,213.90
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.12	1100 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20015	1100 mm dia pipe (in 2.5m.length = 4 Nos.)	metre	10.00	₹ 5,355.00	₹ 53,550.00
20028	Collars 4 Nos.	each	4.00	₹ 1,069.00	₹ 4,276.00
0437	carriage of pipes	100metre	10.00	₹ 9,093.35	₹ 909.34
03001	Cement of 4 joints = 4 x 0.0103 = 0.0412 cum = 0.061 t	tonne	0.061	₹ 6,100.00	₹ 372.10
0421	Carriage of cement	tonne	0.061	₹ 110.94	₹ 6.77
02003	Fine sand for 4 joint = 0.0206 x 4 = 0.0824 cum = 0.082 cum	cum	0.082	₹ 370.00	₹ 30.34
0425	Carriage of sand	cum	0.082	₹ 142.63	₹ 11.70
	LABOUR				
0219	Mason 1st class	Day	1.47	₹ 425.00	₹ 624.75
0220	Mason 2nd class	Day	1.47	₹ 380.00	₹ 558.60
0203	Beldar	Day	6.30	₹ 300.00	₹ 1,890.00
0205	Bhishti	Day	0.60	₹ 300.00	₹ 180.00
	TOTAL				₹ 62,409.60
	Add 1 % for water charges				₹ 624.10
	TOTAL				₹ 63,033.70
	Add 3% for contingencies				₹ 1,891.01
	TOTAL				₹ 64,924.71
	Add 15% for contractor's profit and overheads				₹ 9,738.71
	Cost for 10 metre				₹ 74,663.42
	Cost for 1 metre				₹ 7,466.34
	Say				₹ 7,466.30
20.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 sand:cement: 2 fine) including testing of joints etc. complete				
20.5.13	1200 mm dia. R.C.C. pipe				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 10 metre				
	MATERIALS				
20016	1200 mm dia pipe (in 2.5 m. length = 4 nos.)	metre	10.00	₹ 5,573.00	₹ 55,730.00
20029	Collars 4 Nos	each	4.00	₹ 1,242.00	₹ 4,968.00
0438	Carriage of pipes	100metre	10.00	₹ 9,093.35	₹ 909.34
03001	Cement of 4 joints = 4 x 0.0114 = 0.0456 cum = 0.068 t	tonne	0.068	₹ 6,100.00	₹ 414.80
0421	Carriage of cement	tonne	0.068	₹ 110.94	₹ 7.54
02003	Fine sand for 4 joint = 0.0229 x 4 = 0.0916 cum = 0.092 cum	cum	0.092	₹ 370.00	₹ 34.04
0425	Carriage of sand	cum	0.092	₹ 142.63	₹ 13.12

	LABOUR				
0219	Mason 1 st class	Day	1.59	₹ 425.00	₹ 675.75
0220	Mason 2nd class	Day	1.59	₹ 380.00	₹ 604.20
0203	Beldar	Day	8.67	₹ 300.00	₹ 2,601.00
0205	Bhishti	Day	0.67	₹ 300.00	₹ 201.00
	TOTAL				₹ 66,158.79
	Add 1 % for water charges				₹ 661.59
	TOTAL				₹ 66,820.38
	Add 3% for contingencies				₹ 2,004.61
	TOTAL				₹ 68,824.99
	Add 15% for contractor's profit and overheads				₹ 10,323.75
	Cost for 10 metre				₹ 79,148.74
	Cost for 1 metre				₹ 7,914.87
	Say				₹ 7,914.90
20.6	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement: 3 fine sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :				
20.6.1	With 20 x 20 mm square bar				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one M.S foot rests				
	MATERIALS				
05042	M.S. 20 mm square bar 0.75 m @ 3.137 Kg/m	quintal	0.024	₹ 4,140.00	₹ 99.36
	LABOUR for fabrication				
0207	Black smith (2 nd class)	Day	0.10	₹ 380.00	₹ 38.00
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	Cement concrete 1:3:6 (1 cement: 3 fine sand : 6 graded stone aggregate 20 mm nominal size)				
	0.20 x 0.20 x 0.10 m = 0.004 cum				
	Rate as per item no 4.1.5 of SH : Concrete work (A)	cum	0.004	₹ 7,567.60	₹ 30.27
	LABOUR for fixing M.S. foot rests				
0221	Mason (for ornamental stone work) 1st class	Day	0.02	₹ 425.00	₹ 8.50
0222	Mason (for plain stone work) 2nd class	Day	0.02	₹ 380.00	₹ 7.60
0203	Beldar	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 228.73
	Add 1 % for water charges on all except (A)				₹ 1.98
	TOTAL				₹ 230.71
	Add 3% for contingencies on all except (A)				₹ 6.01
	TOTAL				₹ 236.72
	Add 15% for contractor's profit and overheads on all except (A)				₹ 30.97
	Cost for 1 No				₹ 267.69
	Say				₹ 267.70
20.6	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement: 3 fine sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :				
20.6.2	With 20 mm diameter round bar				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one M.S foot rests				
	MATERIALS				
05039	M.S. round brar 20 mm dia 0.75 m @ 2.47kg / m = 0.018 q.	quintal	0.018	₹ 4,010.00	₹ 72.18
	Labour for fabrication				
0207	Black smith (2nd class)	Day	0.10	₹ 380.00	₹ 38.00
0203	Beldar	Day	0.10	₹ 300.00	₹ 30.00
	Cement concrete 1:3:6 (1 cement: 3 fine sand : 6 graded stone				

	0.20 x 0.20 x 0.10 m = 0.004 cum				
	Rate as per item no 4.1.5 of SH : Concrete work	cum	0.00	₹ 7,567.60	₹ 30.27
	LABOUR for fixing M.S. foot rests				(A)
0221	Mason (for ornamental stone work) 1st class	Day	0.02	₹ 425.00	₹ 8.50
0222	Mason (for plain stone work) 2nd class	Day	0.02	₹ 380.00	₹ 7.60
0203	Beldar	Day	0.05	₹ 300.00	₹ 15.00
	TOTAL				₹ 201.55
	Add 1 % for water charges on all except (A)				₹ 1.71
	TOTAL				₹ 203.26
	Add 3% for contingencies on all except (A)				₹ 5.19
	TOTAL				₹ 208.45
	Add 15% for contractor's profit and overheads on all except (A)				₹ 26.73
	Cost for 1 No				₹ 235.18
	Say				₹ 235.20
20.7	Supplying and fixing C.I. cover without frame for manholes :				
20.7.1	455 x 610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one cover				
	MATERIALS				
20002	C.I. Man-hole cover without frame	each	1.00	₹ 1,200.00	₹ 1,200.00
	LABOUR				
0203	Beldar	Day	0.12	₹ 300.00	₹ 36.00
	TOTAL				₹ 1,236.00
	Add 1 % for water charges				₹ 12.36
	TOTAL				₹ 1,248.36
	Add 3% for contingencies				₹ 37.45
	TOTAL				₹ 1,285.81
	Add 15% for contractor's profit and overheads				₹ 192.87
	Cost for 1 cover				₹ 1,478.68
	Say				₹ 1,478.70
20.7	Supplying and fixing C.I. cover without frame for manholes :				
20.7.2	500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one cover				
	MATERIALS				
20003	C.I. Man-hole cover without frame (medium duty) 500 mm internal diameter	each	1.00	₹ 3,000.00	₹ 3,000.00
	LABOUR				
0203	Beldar	Day	0.12	₹ 300.00	₹ 16.23
	TOTAL				₹ 3,016.23
	Add 1 % for water charges				₹ 30.16
	TOTAL				₹ 3,046.39
	Add 3% for contingencies				₹ 91.39
	TOTAL				₹ 3,137.78
	Add 15% for contractor's profit and overheads				₹ 470.67
	Cost for 1 cover				₹ 3,608.45
	Say				₹ 3,608.50
20.7	Supplying and fixing C.I. cover without frame for manholes :				
20.7.3	560 mm diameter C.I. cover (Heavy duty) the weight of the cover to be not less than 108 kg.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one cover				
	MATERIALS				
20037	C.I. Man-hole cover without frame (heavy duty) 560 mm internal diameter	each	1.00	₹ 5,908.00	₹ 5,908.00
	LABOUR				
0203	Beldar	Day	0.12	₹ 300.00	₹ 16.23

	TOTAL				₹	5,924.23
	Add 1 % for water charges				₹	59.24
	TOTAL				₹	5,983.47
	Add 3% for contingencies				₹	179.50
	TOTAL				₹	6,162.97
	Add 15% for contractor's profit and overheads				₹	924.45
	Cost for 1 cover				₹	7,087.42
	Say				₹	7,087.40
20.8	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with 1st class bricks in cement mortar 1:4 (1 cement : 4 fine sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 fine sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement: 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 fine sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :					
20.8.1:	Inside dimensions 455x610 mm and 45 cm deep for single pipe line :					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one chamber					
	Cement concrete 1:5:10 (1 cement: 5 fine sand : 10 graded stone aggregate 40 mm nominal size)					
	1.22 m x 1.065 m x 0.15 m = 0.195 cum Say 0.20 cum					
	Rate as per item no 4.1.8 SH: conerete work	Cum	0.20	₹ 6,207.70	₹	1,241.54
	1st Class Brick work in cement mortar 1:4(1 cement: 4 fine sand)					
	3.05 m x 0.23 m x 0.30 m = 0.210 cum					
	Less pipe					
	$2 \times \pi/4 \times (0.10)^2 \times 0.23 \text{ m} = (-) 0.004 \text{ cum}$					
	Net qty = 0.206 cum Say 0.21 cum					
	Rate as per item no 6.1.3 of SH : Brick Work	Cum	0.21	₹ 5,408.60	₹	1,135.81
	12 mm cement plaster 1:3 (1 cement: 3 fine sand) finished with floating coat of neat cement					
	Wall: 2.13 x 0.30 m = 0.639 sqm					
	Bed : 0.61 x 0.455 m = 0.278 sqm					
	Total = 0.917 sqm					
	Less pipe $2 \times \pi/4 \times (0.10)^2 = (-) 0.016 \text{ sqm}$					
	Net qty = 0.901 sqm Say 0.90 sqm					
	Rate as per item 12.1.1 & 12.5 of SH : Finishing Work	Sqm	0.90	₹ 209.10	₹	188.19
	Cement concrete 1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)					
	3.05 x 0.23 x 0.15 = 0.105 cum say 0.11 cum					
	Rate as per item no.4.1.3 of SH:Concrete work	cum	0.11	₹ 8,086.90	₹	889.56
	Form work					
	Outer periphery 3.73 x 0.15 m = 0.56 sqm					
	Rate as per item no 4.3.2 of SH : CC work	sqm	0.56	₹ 403.20	₹	225.79
001+6:426:	C.I. Cover with frame 455 x 610 mm	each	1.00	₹ 2,000.00	₹	2,000.00
					(A)	
	TOTAL				₹	5,680.89
	Add 1% for water charges on (A)				₹	20.00
					(B)	
	TOTAL				₹	5,700.89
	Add 3% for contingencies on (A + B)				₹	60.60
					(C)	
	TOTAL				₹	5,761.49
	Add 15% for contractor's profit and overheads on (A+B+C)				₹	312.09
	Cost of one chamber				₹	6,073.58

	Say				₹ 6,073.60
20.8	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with 1st class bricks in cement mortar 1:4 (1 cement : 4 fine sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement :2 fine sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement: 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 fine sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :				
20.8.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one chamber				
	Cement concrete 1:5:10 (1 cement: 5 fine sand : 10 graded stone aggregate 40 mm nominal size)				
	1.31 m x 1.11 m x 0.15 m = 0.22 cum				
	Rate as per item no 4.1.8 SH: concrete work	Cum	0.22	₹ 6,207.70	₹ 1,365.69
	1st Class Brick work in cement mortar 1:4(1 cement: 4 fine sand)				
	3.22 m x 0.23 m x 0.30 m = 0.229 cum				
	Less pipe				
	$3 \times \pi/4 \times (0.10)^2 \times 0.23 \text{ m} = (-) 0.005 \text{ cum}$				
	Net qty = 0.224 cum Say 0.22 cum				
	Rate as per item no 6.1.3 of SH : Brick Work	Cum	0.22	₹ 5,408.60	₹ 1,189.89
	12 mm cement plaster 1:3 (1 cement: 3 fine sand) finished with floating coat of neat cement				
	Wall: 2.40 x 0.30 m = 0.72 sqm				
	Bed : 0.70 x 0.50 m = 0.35 sqm				
	Total = 1.07 sqm				
	Less pipe $3 \times \pi/4 \times (0.10)^2 = (-) 0.02 \text{ sqm}$				
	Net qty = 1.05 sqm				
	Rate as per item 12.1.1 & 12.5 of SH : Finishing Work	Sqm	1.05	₹ 209.10	₹ 219.56
	RCC 1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
	1.16 x 0.96 x 0.15 = 0.167 cum				
	Deduct cover				
	0.61 x 0.45 x 0.15 m = (-) 0.042 cum				
	Net qty = 0.125 cum Say 0.13 cum				
	Rate as per item no. 5.1.3 of SH:RCC work	cum	0.13	₹ 8,139.60	₹ 1,058.15
	Form work				
	Inside area of chamber : 0.70 x 0.50 m = 0.35 sqm				
	Outer periphery 4.00 x 0.15 m = 0.60 sqm				
	Deduct cover : 0.61 x 0.455 m = (-) 0.278 sqm				
	= 0.672 sqm Say 0.67 sqm				
	Rate as per item no 5.9.3 of SH : RCC work	sqm	0.67	₹ 327.80	₹ 219.63
	M.S.reinforcement for slab				
	0.13 cum @ 48.06 kg/cum = 6.25 kg				
	Rate as per item no. 5.20.1 of SH : RCC work	kg	6.25	₹ 59.70	₹ 373.13
001+6:426:	C.I. Cover with frame 455 x 610 mm	each	1.00	₹ 2,000.00	₹ 2,000.00
					(A)
	TOTAL				₹ 6,426.05
	Add 1% for water charges on (A)				₹ 20.00
					(B)
	TOTAL				₹ 6,446.05
	Add 3% for contingencies on (A + B)				₹ 60.60
					(C)
	TOTAL				₹ 6,506.65

	Add 15% for contractor's profit and overheads on (A+B+C)				₹	312.09
	Cost of one chamber				₹	6,818.74
	Say				₹	6,818.70
20.8	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with 1st class bricks in cement mortar 1:4 (1 cement : 4 fine sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement :2 fine sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement: 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 fine sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :					
20.8.3	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets :					
Code	Description	Unit	Quantity	Rate	Amount	
	Details of cost for one chamber					
	Cement concrete 1:5:10 (1 cement: 5 fine sand : 10 graded stone aggregate 40 mm nominal size)					
	1.46 m x 1.21 m x 0.15 m = 0.26 cum					
	Rate as per item no 4.1.8 SH: conerete work	Cum	0.26	₹ 6,207.70	₹	1,614.00
	1st Class Brick work in cement mortar 1:4(1 cement: 4 fine sand)					
	3.82 m x 0.23m x0.30 m = 0.26 cum					
	Less pipe					
	$5 \times \pi/4 \times (0.10)^2 \times 0.23 \text{ m} = (-) 0.009 \text{ cum}$					
	Net qty = 0.251 cum Say 0.26 cum					
	Rate as per item no 6.1.3 of SH : Brick Work	Cum	0.26	₹ 5,408.60	₹	1,406.24
	12 mm cement plaster 1:3 (1 cement: 3 fine sand) finished with floating coat of neat cement					
	Wall: 2.90 x 0.30 m = 0.87 sqm					
	Bed : 0.85 x 0.60 m = 0.51 sqm					
	Total = 1.38 sqm					
	Less pipe $5 \times \pi/4 \times (0.10)^2 = (-) 0.04 \text{ sqm}$					
	Net qty = 1.34 sqm					
	Rate as per item 12.1.1 & 12.5 of SH : Finishing Work	Sqm	1.34	₹ 209.10	₹	280.19
	RCC 1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)					
	1.31 x 1.06 x 0.15 = 0.208 cum					
	Deduct cover					
	0.61 x 0.45 x 0.15 m = (-) 0.042 cum					
	Net qty = 0.166 cum Say 0.17 cum					
	Rate as per item no. 5.1.3 of SH:RCC work	cum	0.17	₹ 8,139.60	₹	1,383.73
	Form work					
	Inside area of chamber : 0.85 x 0.60 m = 0.511 sqm					
	Outer periphery 4.50 x 0.15 m = 0.675 sqm					
	Deduct cover : 0.61 x 0.455 m = (-) 0.278 sqm					
	= 0.908 sqm Sau .91					
	Rate as per item no 5.9.3 of SH : RCC work	sqm	0.91	₹ 327.80	₹	298.30
	M.S.reinforcement for slab					
	0.17 cum @ 48.06 kg/cum = 8.17 kg					
	Rate as per item no. 5.20.1 of SH : RCC work	kg	8.17	₹ 59.70	₹	487.75
001+6:426:	C.I. Cover with frame 455 x 610 mm	each	1.00	₹ 2,000.00	₹	2,000.00
					(A)	
	TOTAL				₹	7,470.21
	Add 1% for water charges on (A)				₹	20.00
					(B)	
	TOTAL				₹	7,490.21
	Add 3% for contingencies on (A + B)				₹	60.60

					(C)
	TOTAL				₹ 7,550.81
	Add 15% for contractor's profit and overheads on (A+B+C)				₹ 312.09
	Cost of one chamber				₹ 7,862.90
	Say				₹ 7,862.90
20.9	Extra for depth beyond 450 mm of brick masonry chamber for underground C.I. inspection chamber with same specification as mentioned in item no 20.30 complete as per standard design :				
20.9.1	For 455x610 mm size				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one metre				
	1st Class Brick work in cement mortar 1:4(1 cement: 4 fine sand)				
	3.05 m x 0.23 m x 1.00 m = 0.70 cum				
	Rate as per item no 6.1.3 of SH : Brick Work	cum	0.70	₹ 5,408.60	₹ 3,786.02
	12mm cement plaster1:3 (1 cement: 3 fine sand finished with floating coat of neat cement				
	Wall: 2.13 m x1.00 m = 2.13 sqm				
	Rate as per item 12.1.1 & 12.5 of SH : Finishing Work	sqm	2.13	₹ 209.10	₹ 445.38
	TOTAL				₹ 4,231.40
	Cost per metre				₹ 4,231.40
	Say				₹ 4,231.40
20.9	Extra for depth beyond 450 mm of brick masonry chamber for underground C.I. inspection chamber with same specification as mentioned in item no 20.30 complete as per standard design :				
20.9.2	For 500x700 mm size				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one metre				
	1st Class Brick work in cement mortar 1:4(1 cement: 4 fine sand)				
	3.32 m x 0.23 m x 1.00m = 0.76 cum				
	Rate as per item no 6.1.3 of SH : Brick Work	cum	0.76	₹ 5,408.60	₹ 4,110.54
	12mm cement plaster1:3 (1 cement: 3 fine sand) finished with floating coat of neat cement				
	Wall: 2.40 m x 1.00 m = 2.40 sqm				
	Rate as per item 12.1.1 & 12.5 of SH : Finishing Work	sqm	2.40	₹ 209.10	₹ 501.84
	TOTAL				₹ 4,612.38
	Cost per metre				₹ 4,612.38
	Say				₹ 4,612.40
20.9	Extra for depth beyond 450 mm of brick masonry chamber for underground C.I. inspection chamber with same specification as mentioned in item no 20.30 complete as per standard design :				
20.9.3	For 600x850 mm size				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one metre				
	1st Class Brick work in cement mortar 1:4(1 cement: 4 fine sand)				
	3.82 m x 0.23 m x 1.00 m = 0.88 cum				
	Rate as per item no 6.1.3 of SH : Brick Work	cum	0.88	₹ 5,408.60	₹ 4,759.57
	12 mm cement plaster 1:3(1 cement: 3 fine sand finished with floating coat of neat cement				
	Wall : 2.90 m x 1.00 m = 2.90 sqm				
	Rate as per item 12.1.1 & 12.5 of SH : Finishing Work	sqm	2.90	₹ 209.10	₹ 606.39
	TOTAL				₹ 5,365.96
	Cost per metre				₹ 5,365.96
	Say				₹ 5,366.00

20.10	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with well burnt 2nd class bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one soak pit				
	Earth work in excavation including disposal of surplus earth				
	$\pi/4 \times (2.5)^2 \times 3 \text{ m} = 14.73 \text{ cum}$ Rate as per item no. 2.12.1 of SH : Earth work	cum	14.73	₹ 128.80	₹ 1,897.22
	$\pi/4 \times (2.5)^2 \times 1.5 \text{ m} = 7.37 \text{ cum}$ Rate as per item no. 2.17 of SH : Earth work	cum	7.37	₹ 27.20	₹ 200.46
	2nd class bricks				(A)
	perimetre = $4 \times 0.35 = 1.40 \text{ m}$				
	Area = $1.40 \times 2.925 \text{ m} = 4.10 \text{ sqm}$				
	Number of brick = $4.1 \times 380 \times 0.066 = 102.83 \text{ Nos}$				
	Wastage 5% = 5.14 Nos				
06002	Total = 107.97 Say 108 Nos	1000 Nos	108.00	₹ 6,690.00	₹ 722.52
	Brickbats = $\pi/4 \times (1.2)^2 \times 2.925 \text{ m} = 3.33 \text{ cum}$				
	Deduct = $0.45 \times 0.45 \times 2.925 \text{ m} = 0.59 \text{ cum}$				
20039	Net qty = 2.74 cum	cum	2.74	₹ 1,950.00	₹ 5,343.00
	Brick aggregate 50 to 80 mm nominal size				
20040	= $\pi \times 1.50 \times 0.30 \times 2.925 \text{ m} = 4.13 \text{ cum}$	cum	4.13	₹ 2,180.00	₹ 9,003.40
	Brick aggregate 40 mm nominal size				
20041	= $\pi \times 2.15 \times 0.35 \times 2.925 \text{ m} = 6.91 \text{ cum}$	cum	6.91	₹ 2,240.00	₹ 15,478.40
20030	100 mm diametre S.W. pipes (60 cm long)	each	3.00	₹ 54.00	₹ 162.00
	Carriage of brick bats and aggregate				
0404	(2.74 + 4.13 + 6.91) cum = 6.25 sqm	cum	13.78	₹ 172.74	₹ 2,380.36
0406	Carriage of bricks	1000Nos	145.00	₹ 332.82	₹ 48.26
	Precast R.C.C.slabs 7.5 cm thick in cement concrete 1:2:4 (1 cement: 2 fine sand : 4 graded stone aggregate 20 mm nominal size)				
	$0.45 \times 0.45 \times 0.075 \text{ m} = 0.02 \text{ cum}$ Rate as per item no 5.17 of SH : RCC work	cum	0.02	₹ 17,310.00	₹ 346.20
	Reinforcement @ 80 kg/cum = $0.02 \times 80 = 1.60 \text{ Kg}$ Rate as per item no. 5.20.4 of SH : RCC work	kg	1.60	₹ 59.70	₹ 95.52
06002	2nd class brick edging laid length wise with half brick depth.				(B)
	$3.14 \times 2.6 \text{ m} = 8.17 \text{ m @ 4 Nos/Mtr} = 32.68 \text{ Nos, Say 33 Nos}$	Nos	33.00	₹ 6,690.00	₹ 220.77
0406	Carriage of bricks	1000Nos	33.00	₹ 332.82	₹ 10.98
	LABOUR				
0219	Mason (brick layer) 1st class	Day	0.50	₹ 425.00	₹ 212.50
0220	Mason (brick layer) 2nd class	Day	0.50	₹ 380.00	₹ 190.00
0203	Belder	Day	3.00	₹ 300.00	₹ 900.00
0212	Coolie/Helper	Day	3.00	₹ 300.00	₹ 900.00
	TOTAL				₹ 38,111.59
	Add 1% for water charges on all except on (A+B)				₹ 355.72
	TOTAL				₹ 38,467.31
	Add 3% for contingencies on all except on (A + B)				₹ 1,077.84
	TOTAL				₹ 39,545.15
	(A+B)				₹ 5,550.86
	Cost of one soak pit				₹ 45,096.01
	Say				₹ 45,096.00
20.11	Constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.				
Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for one soak pit				
	Earth work in excavation including disposal of surplus earth				
	$1.2 \times 1.2 \times 1.2 \text{ m} = 1.73 \text{ cum}$				

	Rate as per item no. 2.13.1 of SH : Earth work	cum	1.73	₹	150.10	₹	259.67
	Brick bats						(A)
20039	1.2 x 12 x 1.2 m = 1.73 cum	cum	1.73	₹	1,950.00	₹	3,373.50
0404	Carriage of brickbats	cum	1.73	₹	172.74	₹	298.84
06002	2nd class brick edging laid length wise with half brick depth						
	= 5.20 m @ 4 Nos/Mtr = 20.80 Nos , Say 21 Nos	1000 Nos	21.00	₹	6,690.00	₹	140.49
0406	Carriage of bricks	1000Nos	21.00	₹	332.82	₹	6.99
20030	S.W. pipe 100 mm diameter (60 cm long)	each	2.00	₹	54.00	₹	108.00
	LABOUR						
	For filling brick bats						
0203	Belder	Day	0.50	₹	300.00	₹	150.00
	TOTAL					₹	4,337.49
	Add 1% for water charges on all except on (A)					₹	40.78
	TOTAL					₹	4,378.27
	Add 3% for contingencies on all except on (A)					₹	123.56
	TOTAL					₹	4,501.83
	Add 15% for contractor's profit and overheads on all except on (A)					₹	636.32
	Cost of one soak pit					₹	5,138.15
	Say					₹	5,138.20

S U B - H E A D - 2 1



B A M B O O A N D T H A T C H
R O O F I N G W O R K

SUB HEAD : 21.0 / BAMBOO WORK AND THATCH ROOFING WORK**BASIC RATES**

Code No	Description	Unit	Rate
0203	Beldar	Day	₹ 300.00
0212	Coolie/Helper	Day	₹ 300.00
0224	Mate	Day	₹ 300.00
0231	Thatcher	Day	₹ 300.00
21001	Muli Bamboo 25 mm to 40 mm dia	m	₹ 4.50
21002	G.I. wire 1.0 mm	kg	₹ 58.00
21003	Bamboo dhari mat	sqm	₹ 50.00
21004	Thatch (Sungrass) 300 mm dia. Bundle	bundle	₹ 55.00
21005	Barak bamboo	m	₹ 20.00

SUB HEAD : 21.0

BAMBOO WORK AND THATCH ROOFING WORK

21.1	Providing and fixing roof frame with muli bamboo of 25 mm to 40 mm dia, placed at 150 mm centre to centre, including a layer of bamboo dhari mat lining over the frame, tied with 1.0 mm G.I. wire complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 sqm				
	LABOUR:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	1.00	₹ 300.00	₹ 300.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	136.00	₹ 4.50	₹ 612.00
21002	G.I wire 1.0 mm	Kg	0.34	₹ 58.00	₹ 19.72
21003	Bamboo dhari mat	Sqm	9.75	₹ 50.00	₹ 487.50
					₹ 1,743.22
	Add for Sundries and contingencies	@	3%		₹ 52.30
					₹ 1,795.52
	Add for contractor's profit and overheads	@	15%		₹ 269.33
	Cost for bamboo dhari mat lining 9.20 Sqm.				₹ 2,064.84
	Cost per sqm				₹ 224.44
	Rate per sqm	Say			₹ 224.40

21.2	Providing and fixing roof frame with muli bamboo of 25 mm to 40 mm dia, placed at 225 mm centre to centre, including a layer of bamboo dhari mat lining over the frame, tied with 1.0 mm G.I. wire complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 sqm				
	LABOUR:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	1.00	₹ 300.00	₹ 300.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	93.00	₹ 4.50	₹ 418.50
21002	G.I wire 1.0 mm	Kg	0.34	₹ 58.00	₹ 19.72
21003	Bamboo dhari mat	Sqm	9.75	₹ 50.00	₹ 487.50
					₹ 1,549.72
	Add for Sundries and contingencies	@	3%		₹ 46.49
					₹ 1,596.21
	Add for contractor's profit and overheads	@	15%		₹ 239.43
	Cost for bamboo dhari mat lining 9.20 Sqm.				₹ 1,835.64
	Cost per sqm				₹ 199.53
	Rate per sqm	Say			₹ 199.50

21.3	Providing and fixing ceiling frame with muli bamboo of 25 mm to 40 mm dia, placed at 600 mm centre to centre, tied with 1.0 mm G.I. wire complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 sqm				
	LABOUR:				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	1.50	₹ 300.00	₹ 450.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	40.00	₹ 4.50	₹ 180.00
21002	G.I wire 1.0 mm	Kg	0.34	₹ 58.00	₹ 19.72
					₹ 979.72
	Add for Sundries and contingencies	@	3%		₹ 29.39
					₹ 1,009.11
	Add for contractor's profit and overheads	@	15%		₹ 151.37
	Cost for 9.20 Sqm.				₹ 1,160.48
	Cost per sqm				₹ 126.14
	Rate per Sqm.	Say			₹ 126.10

21.4	Providing and fixing muli bamboo shingle roofing with 100 mm spacing of shingles and bamboo battens tied with G.I. wire 1.0 mm with roof frame complete (roof frame to be paid separately) as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 sqm				
	LABOUR:				
0224	Mate	Day	0.36	₹ 300.00	₹ 108.00
0231	Thatcher	Day	3.00	₹ 300.00	₹ 900.00
0212	Coolie/Helper	Day	6.00	₹ 300.00	₹ 1,800.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	200.00	₹ 4.50	₹ 900.00
21002	G.I wire 1.0 mm	Kg	0.45	₹ 58.00	₹ 26.10
					₹ 3,734.10
	Add for Sundries and contingencies	@	3%		₹ 112.02
					₹ 3,846.12
	Add for contractor's profit and overheads	@	15%		₹ 576.92
	Cost for 9.20 Sqm.				₹ 4,423.04
	Cost per sqm				₹ 480.77
	Rate per sqm	Say			₹ 480.80

21.5	Providing and fixing muli bamboo shingle roofing with 100 mm spacing of shingles and bamboo battens tied with G.I. wire 1.0 mm with roof frame complete (roof frame to be paid separately) as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
21.5.1	225 mm thick thatching				
	Details of cost for 9.20 sqm				
	LABOUR:				
0224	Mate	Day	0.16	₹ 300.00	₹ 48.00
0231	Thatcher	Day	2.00	₹ 300.00	₹ 600.00
0212	Coolie/Helper	Day	2.00	₹ 300.00	₹ 600.00
	MATERIAL				
21004	Thatch (sungrass) 300 mm dia bundle	Bundle	37.50	₹ 60.00	₹ 2,250.00
21001	Muli bamboo 25 mm to 40mm dia	m	15.00	₹ 4.50	₹ 67.50
21002	G.I wire 1.0 mm	Kg	0.23	₹ 58.00	₹ 13.34

					₹ 3,578.84
	Add for Sundries and contingencies	@	3%		₹ 107.37
					₹ 3,686.21
	Add for contractor's profit and overheads	@	15%		₹ 552.93
	Cost for 9.20 Sqm.				₹ 4,239.14
	Cost per sqm				₹ 460.78
	Rate per sqm	Say			₹ 460.80

21.5.2	150 mm thick thatching				
	Details of cost for 9.20 sqm				
	LABOUR:				
0224	Mate	Day	0.13	₹ 300.00	₹ 39.00
0231	Thatcher	Day	1.25	₹ 300.00	₹ 375.00
0212	Coolie/Helper	Day	2.00	₹ 300.00	₹ 600.00
	MATERIAL				
21004	Thatch (sungrass) 300 mm dia bundle	Bundle	25.00	₹ 60.00	₹ 1,500.00
21001	Muli bamboo 25 mm to 40mm dia	m	15.00	₹ 4.50	₹ 67.50
21002	G.I wire 1.0 mm	Kg	0.23	₹ 58.00	₹ 13.34
					₹ 2,594.84
	Add for Sundries and contingencies	@	3%		₹ 77.85
					₹ 2,672.69
	Add for contractor's profit and overheads	@	15%		₹ 400.90
	Cost for 9.20 Sqm.				₹ 3,073.59
	Cost per sqm				₹ 334.09
	Rate per sqm	Say			₹ 334.10

21.5.3	100 mm thick thatching				
	Details of cost for 9.20 sqm				
	LABOUR:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0231	Thatcher	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie/Helper	Day	1.50	₹ 300.00	₹ 450.00
	MATERIAL				
21004	Thatch (sungrass) 300 mm dia bundle	Bundle	16.00	₹ 60.00	₹ 960.00
21001	Muli bamboo 25 mm to 40mm dia	m	15.00	₹ 4.50	₹ 67.50
21002	G.I wire 1.0 mm	Kg	0.23	₹ 58.00	₹ 13.34
					₹ 1,664.84
	Add for Sundries and contingencies	@	3%		₹ 49.95
					₹ 1,714.79
	Add for contractor's profit and overheads	@	15%		₹ 257.22
	Cost for 9.20 Sqm.				₹ 1,972.00
	Cost per sqm				₹ 214.35
	Rate per sqm	Say			₹ 214.30

21.5.4	75 mm thick thatching				
	Details of cost for 9.20 sqm				
	LABOUR:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0231	Thatcher	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie/Helper	Day	1.50	₹ 300.00	₹ 450.00
	MATERIAL				
21004	Thatch (sungrass) 300 mm dia bundle	Bundle	12.75	₹ 60.00	₹ 765.00
21001	Muli bamboo 25 mm to 40mm dia	m	15.00	₹ 4.50	₹ 67.50
21002	G.I wire 1.0 mm	Kg	0.23	₹ 58.00	₹ 13.34
					₹ 1,469.84
	Add for Sundries and contingencies	@	3%		₹ 44.10
					₹ 1,513.94
	Add for contractor's profit and overheads	@	15%		₹ 227.09
	Cost for 9.20 Sqm.				₹ 1,741.03
	Cost per sqm				₹ 189.24
	Rate per sqm	Say			₹ 189.20

21.6	Providing and fixing 600 mm wide ridges & hips with double layer bamboo dhari mat and top layer with one layer bamboo tarja, tied with G.I. wire 1.0 mm with roof frame complete (roof frame to be paid separately) as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 6.00 metre				
	LABOUR:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	1.00	₹ 300.00	₹ 300.00
	MATERIAL				
21003	Bamboo dhari mat	Sqm	3.96	₹ 50.00	₹ 198.00
21001	Muli bamboo 25 mm to 40mm dia	m	63.00	₹ 4.50	₹ 283.50
21002	G.I wire 1.0 mm	Kg	0.08	₹ 58.00	₹ 4.64
					₹ 1,110.14
	Add for Sundries and contingencies	@	3%		₹ 33.30
					₹ 1,143.44
	Add for contractor's profit and overheads	@	15%		₹ 171.52
	Cost for 6.00 metre				₹ 1,314.96
	Cost per metre				₹ 219.16
	Rate per metre	Say			₹ 219.20

21.7	Providing and fixing 600 mm wide ridges & hips with sungrass tied with G.I. wire 1.0 mm with roof frame complete (roof frame to be paid separately) as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 6.00 metre				
	LABOUR:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0231	Thatcher	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie/Helper	Day	0.50	₹ 300.00	₹ 150.00
	MATERIAL				
21004	Thatch (sungrass) 300 mm dia bundle	Bundle	15.00	₹ 60.00	₹ 900.00
21001	Muli bamboo 25 mm to 40mm dia	m	12.00	₹ 4.50	₹ 54.00
21002	G.I wire 1.0 mm	Kg	0.08	₹ 58.00	₹ 4.64
					₹ 1,270.64
	Add for Sundries and contingencies	@	3%		₹ 38.12
					₹ 1,308.76
	Add for contractor's profit and overheads	@	15%		₹ 196.31
	Cost for 6.00 metre				₹ 1,505.07
	Cost per metre				₹ 250.85
	Rate per metre	Say			₹ 250.80

21.8	Providing and fixing double dhari mat ceiling, strengthening with single split bamboo battens (both side) and tied with G.I. wire 1.0 mm complete (over required beams or fixed with a frame of suitable type, which will be paid separately) as per specification.				
21.8.1	with batten at 150 mm centre to centre				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0231	Thatcher	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie/Helper	Day	2.00	₹ 300.00	₹ 600.00
	MATERIAL				
21003	Bamboo dhari mat	Sqm	9.75	₹ 50.00	₹ 487.50
21001	Muli bamboo 25 mm to 40mm dia	m	136.00	₹ 4.50	₹ 612.00
21002	G.I wire 1.0 mm	Kg	0.23	₹ 58.00	₹ 13.34
					₹ 1,892.84

	Add for Sundries and contingencies	@	3%		₹ 56.79
					₹ 1,949.63
	Add for contractor's profit and overheads	@	15%		₹ 292.44
	Cost for 9.20 sqm				₹ 2,242.07
	Cost per sqm				₹ 243.70
	Rate per sqm	Say			₹ 243.70

21.8.2	with batten at 225 mm centre to centre				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0231	Thatcher	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie/Helper	Day	1.50	₹ 300.00	₹ 450.00
	MATERIAL				
21003	Bamboo dhari mat	Sqm	9.75	₹ 50.00	₹ 487.50
21001	Muli bamboo 25 mm to 40mm dia	m	93.00	₹ 4.50	₹ 418.50
21002	G.I wire 1.0 mm	Kg	0.19	₹ 58.00	₹ 11.02
					₹ 1,541.02
	Add for Sundries and contingencies	@	3%		₹ 46.23
					₹ 1,587.25
	Add for contractor's profit and overheads	@	15%		₹ 238.09
	Cost for 9.20 sqm				₹ 1,825.34
	Cost per sqm				₹ 198.41
	Rate per sqm	Say			₹ 198.40

21.8.3	with batten at 300 mm centre to centre				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0231	Thatcher	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie/Helper	Day	1.00	₹ 300.00	₹ 300.00
	MATERIAL				
21003	Bamboo dhari mat	Sqm	9.75	₹ 50.00	₹ 487.50
21001	Muli bamboo 25 mm to 40mm dia	m	71.00	₹ 4.50	₹ 319.50
21002	G.I wire 1.0 mm	Kg	0.15	₹ 58.00	₹ 8.70
					₹ 1,283.70
	Add for Sundries and contingencies	@	3%		₹ 38.51
					₹ 1,322.21
	Add for contractor's profit and overheads	@	15%		₹ 198.33
	Cost for 9.20 sqm				₹ 1,520.54
	Cost per sqm				₹ 165.28
	Rate per sqm	Say			₹ 165.30

21.9	Providing and fixing muli bamboo champakampa tarja (75 mm wide) ceiling, strengthening with single split bamboo battens (both side) at 300 mm centre to centre and tied with G.I. wire 1.0 mm complete (over required beams or fixed with a frame of suitable type, which will be paid separately) as per specification.				

Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
	LABOUR:				
0224	Mate	Day	0.20	₹ 300.00	₹ 60.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	4.00	₹ 300.00	₹ 1,200.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	335.00	₹ 4.50	₹ 1,507.50
21002	G.I wire 1.0 mm	Kg	0.45	₹ 58.00	₹ 26.10
					₹ 3,093.60
	Add for Sundries and contingencies	@	3%		₹ 92.81
					₹ 3,186.41
	Add for contractor's profit and overheads	@	15%		₹ 477.96
	Cost for 9.20 sqm.				₹ 3,664.37
	Cost per sqm				₹ 398.30
	Rate per sqm	Say			₹ 398.30

21.10	Providing and fixing muli bamboo champakampa tarja (75 mm wide) walling, strengthening with single split bamboo battens (both side) at 300 mm centre to centre and tied with G.I. wire 1.0 mm complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
	LABOUR:				
0224	Mate	Day	0.16	₹ 300.00	₹ 48.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	3.00	₹ 300.00	₹ 900.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	335.00	₹ 4.50	₹ 1,507.50
21002	G.I wire 1.0 mm	Kg	0.35	₹ 58.00	₹ 20.30
					₹ 2,775.80
	Add for Sundries and contingencies	@	3%		₹ 83.27
					₹ 2,859.07
	Add for contractor's profit and overheads	@	15%		₹ 428.86
	Cost for 9.20 sqm.				₹ 3,287.94
	Cost per sqm				₹ 357.38
	Rate per sqm	Say			₹ 357.40

21.11	Providing and fixing muli bamboo champakampa tarja (75 mm wide) walling, strengthening with single split bamboo battens (both side) at 300 mm centre to centre and tied with G.I. wire 1.0 mm including one layer of dhari mat lining complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
	LABOUR:				
0224	Mate	Day	0.16	₹ 300.00	₹ 48.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	3.00	₹ 300.00	₹ 900.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	335.00	₹ 4.50	₹ 1,507.50
21003	Bamboo dhari mat	Sqm	9.75	₹ 50.00	₹ 487.50
21002	G.I wire 1.0 mm	Kg	0.35	₹ 58.00	₹ 20.30
					₹ 3,263.30
	Add for Sundries and contingencies	@	3%		₹ 97.90
					₹ 3,361.20
	Add for contractor's profit and overheads	@	15%		₹ 504.18
	Cost for 9.20 sqm.				₹ 3,865.38
	Cost per sqm				₹ 420.15
	Rate per sqm	Say			₹ 420.10

21.12	Providing and fixing muli bamboo plain oven tarja (75 mm wide) walling, strengthening with single split bamboo battens (both side) at 300 mm centre to centre and tied with G.I. wire 1.0 mm including one layer of dhari mat lining complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	2.00	₹ 300.00	₹ 600.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	222.00	₹ 4.50	₹ 999.00
21003	Bamboo dhari mat	Sqm	9.75	₹ 50.00	₹ 487.50
21002	G.I wire 1.0 mm	Kg	0.35	₹ 58.00	₹ 20.30
					₹ 2,442.80
	Add for Sundries and contingencies	@	3%		₹ 73.28
					₹ 2,516.08
	Add for contractor's profit and overheads	@	15%		₹ 377.41
	Cost for 9.20 sqm.				₹ 2,893.50
	Cost per sqm				₹ 314.51
	Rate per sqm	Say			₹ 314.50

21.13	Providing and fixing double layer dhari mat walling, strengthening with single split bamboo battens (both side) at 300 mm centre to centre and tied with G.I. wire 1.0 mm complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	1.50	₹ 300.00	₹ 450.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	71.00	₹ 4.50	₹ 319.50
21003	Bamboo dhari mat	Sqm	19.50	₹ 50.00	₹ 975.00
21002	G.I wire 1.0 mm	Kg	0.35	₹ 58.00	₹ 20.30
					₹ 2,094.80
	Add for Sundries and contingencies	@	3%		₹ 62.84
					₹ 2,157.64
	Add for contractor's profit and overheads	@	15%		₹ 323.65
	Cost for 9.20 sqm.				₹ 2,481.29
	Cost per sqm				₹ 269.71
	Rate per sqm	Say			₹ 269.70

21.14	Providing and fixing muli bamboo (tarja) jafri, strengthening with single split bamboo battens (both side) at 450 mm centre to centre and tied with G.I. wire 1.0 mm complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.12	₹ 300.00	₹ 36.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	2.00	₹ 300.00	₹ 600.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	190.00	₹ 4.50	₹ 855.00

21002	G.I wire 1.0 mm	Kg	0.20	₹ 58.00	₹ 11.60
					₹ 1,802.60
	Add for Sundries and contingencies	@	3%		₹ 54.08
					₹ 1,856.68
	Add for contractor's profit and overheads	@	15%		₹ 278.50
	Cost for 9.20 sqm.				₹ 2,135.18
	Cost per sqm				₹ 232.08
	Rate per sqm	Say			₹ 232.10

21.15	Providing and fixing muli bamboo plain oven tarja walling in compound fencing , strengthening with single split bamboo battens (both side) at 450 mm centre to centre and tied with G.I. wire 1.0 mm complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.10	₹ 300.00	₹ 30.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	1.50	₹ 300.00	₹ 450.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	222.00	₹ 4.50	₹ 999.00
21002	G.I wire 1.0 mm	Kg	0.20	₹ 58.00	₹ 11.60
					₹ 1,790.60
	Add for Sundries and contingencies	@	3%		₹ 53.72
					₹ 1,844.32
	Add for contractor's profit and overheads	@	15%		₹ 276.65
	Cost for 9.20 sqm.				₹ 2,120.97
	Cost per sqm				₹ 230.54
	Rate per sqm	Say			₹ 230.50

21.16	Providing and fixing whole muli bamboo (placed closely) walling, strengthening with whole muli bamboo battens (both side) at 600 mm centre to centre and tied with G.I. wire 1.0 mm complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0231	Thatcher	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie/Helper	Day	0.50	₹ 300.00	₹ 150.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	472.00	₹ 4.50	₹ 2,124.00
21002	G.I wire 1.0 mm	Kg	0.40	₹ 58.00	₹ 23.20
					₹ 2,459.20
	Add for Sundries and contingencies	@	3%		₹ 73.78
					₹ 2,532.98
	Add for contractor's profit and overheads	@	15%		₹ 379.95
	Cost for 9.20 sqm.				₹ 2,912.92
	Cost per sqm				₹ 316.62
	Rate per sqm	Say			₹ 316.60

21.17	Providing and fixing whole muli bamboo machan, each bamboo tied with coir rope at 150 mm centre to centre, with one layer of champakampa tarja matting complete over a suitable structure properly tied with coir rope as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 15.20 Sqm.				
	LABOUR:				
0224	Mate	Day	0.20	₹ 300.00	₹ 60.00
0231	Thatcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	4.00	₹ 300.00	₹ 1,200.00
	MATERIAL				
21001	Muli bamboo 25 mm to 40mm dia	m	798.00	₹ 4.50	₹ 3,591.00

21002	G.I wire 1.0 mm	Kg	5.00	₹ 58.00	₹ 290.00
					₹ 5,441.00
	Add for Sundries and contingencies	@	3%		₹ 163.23
					₹ 5,604.23
	Add for contractor's profit and overheads	@	15%		₹ 840.63
	Cost for 15.20 sqm.				₹ 6,444.86
	Cost per sqm				₹ 424.00
	Rate per sqm	Say			₹ 424.00

21.18	Providing and fixing barak bamboo 75 mm to 100 mm dia posts, post plates, ties, king posts, rafters, runners etc. tied with coir rope complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.00 metre.				
	LABOUR:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0231	Thatcher	Day	0.10	₹ 300.00	₹ 30.00
0212	Coolie/Helper	Day	0.10	₹ 300.00	₹ 30.00
	MATERIAL				
21005	Barak bamboo 75 mm to 100mm dia	m	10.00	₹ 20.00	₹ 200.00
21002	G.I wire 1.0 mm	Kg	1.00	₹ 58.00	₹ 58.00
					₹ 321.00
	Add for Sundries and contingencies	@	3%		₹ 9.63
					₹ 330.63
	Add for contractor's profit and overheads	@	15%		₹ 49.59
	Cost for 9.00 metre.				₹ 380.22
	Cost per sqm				₹ 42.25
	Rate per sqm	Say			₹ 42.20

21.19	Providing and fixing barak bamboo 75 mm to 100 mm dia posts, runners, struts, bracings, collars etc. fixed with MS nails complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.00 metre.				
	LABOUR:				
0224	Mate	Day	0.005	₹ 300.00	₹ 1.50
0231	Thatcher	Day	0.05	₹ 300.00	₹ 15.00
0212	Coolie/Helper	Day	0.05	₹ 300.00	₹ 15.00
	MATERIAL				
21005	Barak bamboo 75 mm to 100mm dia	m	10.00	₹ 20.00	₹ 200.00
21002	G.I wire 1.0 mm	Kg	0.50	₹ 58.00	₹ 29.00
					₹ 260.50
	Add for Sundries and contingencies	@	3%		₹ 7.82
					₹ 268.32
	Add for contractor's profit and overheads	@	15%		₹ 40.25
	Cost for 9.00 metre.				₹ 308.56
	Cost per sqm				₹ 34.28
	Rate per sqm	Say			₹ 34.30

21.20	Excavating holes upto 0.10 cum including getting out the excavated soil, placing posts, then returning the soil as required in holes in layers not exceeding 200 mm in depth, consolidating each deposited layer by watering and ramming, disposal of surplus excavated soil as directed with all leads and lifts complete as per specification.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 15 Nos holes				
	LABOUR:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0203	Beldar	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	1.00	₹ 300.00	₹ 300.00
					₹ 624.00
	Add for Sundries and contingencies	@	3%		₹ 18.72
					₹ 642.72

	Add for contractor's profit and overheads	@	15%		₹ 96.41
	Cost for 15 Nos holes				₹ 739.13
	Cost per hole				₹ 49.28
	Rate per hole	Say			₹ 49.30

21.21	Dismantling all types of thatch roofing with sungrass including stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m as directed by the Engineer-in-charge.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.00 sqm.				
	LABOUR:				
0224	Mate	Day	0.04	₹ 300.00	₹ 12.00
0231	Thetcher	Day	0.50	₹ 300.00	₹ 150.00
0212	Coolie/Helper	Day	0.50	₹ 300.00	₹ 150.00
					₹ 312.00
	Add for Sundries and contingencies	@	3%		₹ 9.36
					₹ 321.36
	Add for contractor's profit and overheads	@	15%		₹ 48.20
	Cost for 9.00 sqm.				₹ 369.56
	Cost per sqm				₹ 41.06
	Rate per sqm	Say			₹ 41.10

21.22	Dismantling bamboo roof frame including stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m as directed by the Engineer-in-charge.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.00 sqm.				
	LABOUR:				
0224	Mate	Day	0.06	₹ 300.00	₹ 18.00
0231	Thetcher	Day	0.80	₹ 300.00	₹ 240.00
0212	Coolie/Helper	Day	0.80	₹ 300.00	₹ 240.00
					₹ 498.00
	Add for Sundries and contingencies	@	3%		₹ 14.94
					₹ 512.94
	Add for contractor's profit and overheads	@	15%		₹ 76.94
	Cost for 9.00 sqm.				₹ 589.88
	Cost per sqm				₹ 65.54
	Rate per sqm	Say			₹ 65.50

21.23	Dismantling bamboo shingle roofing including stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m as directed by the Engineer-in-charge.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.00metre.				
	LABOUR:				
0224	Mate	Day	0.07	₹ 300.00	₹ 21.00
0231	Thetcher	Day	0.90	₹ 300.00	₹ 270.00
0212	Coolie/Helper	Day	0.90	₹ 300.00	₹ 270.00
					₹ 561.00
	Add for Sundries and contingencies	@	3%		₹ 16.83
					₹ 577.83
	Add for contractor's profit and overheads	@	15%		₹ 86.67
	Cost for 9.00 metre				₹ 664.50
	Cost per metre				₹ 73.83
	Rate per metre	Say			₹ 73.80

21.24	Dismantling bamboo ridges & hips including stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m as directed by the Engineer-in-charge.				

Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.00 metre.				
	LABOUR:				
0224	Mate	Day	0.01	₹ 300.00	₹ 3.00
0231	Thetcher	Day	0.15	₹ 300.00	₹ 45.00
0212	Coolie/Helper	Day	0.15	₹ 300.00	₹ 45.00
					₹ 93.00
	Add for Sundries and contingencies	@	3%		₹ 2.79
					₹ 95.79
	Add for contractor's profit and overheads	@	15%		₹ 14.37
	Cost for 9.00 metre.				₹ 110.16
	Cost per metre.				₹ 12.24
	Rate per metre.	Say			₹ 12.20

21.25	Dismantling all kinds of bamboo ceiling, walling, machan etc. including stacking of serviceable materials and unserviceable materials separately with all lifts and upto a lead of 50 m as directed by the Engineer-in-charge.				
Code	Discription	Unit	Quantity	Rate	Amount
	Details of cost for 9.00 sqm.				
	LABOUR:				
0224	Mate	Day	0.08	₹ 300.00	₹ 24.00
0231	Thetcher	Day	1.00	₹ 300.00	₹ 300.00
0212	Coolie/Helper	Day	1.00	₹ 300.00	₹ 300.00
					₹ 624.00
	Add for Sundries and contingencies	@	3%		₹ 18.72
					₹ 642.72
	Add for contractor's profit and overheads	@	15%		₹ 96.41
	Cost for 9.00 sqm				₹ 739.13
	Cost per sqm.				₹ 82.13
	Rate per sqm.	Say			₹ 82.10