#### OIL INDIA LIMITED

(A Government of India Enterprise)
P.O. Duliajan – 786602, Assam, India
Website: www.oil-india.com

### Corrigendum No. 2 to IFB No. CPI6560P21

# Construction and Comprehensive Operation and Maintenance for Seven Towers of G+6 storied New Residential Complex in Oil India Limited, Duliajan, Distt. Dibrugarh (Assam)

- 1. This Corrigendum is issued to notify that NIT including Terms, conditions, specifications and stipulations of the Bidding Document shall stand modified to the extent indicated here below under column "Modified Clause" of **Annexure-I**.
- d) Revised SOR/P for BOQ schedule is uploaded as attached in Annexure- II.
- 2. All other terms and conditions of the tender remain unaltered.
- 3. All the prospective bidders are requested to regularly visit OIL's Website: www.oil-india.com and e-procurement portal <a href="https://etender.srm.oilindia.in/irj/portal">https://etender.srm.oilindia.in/irj/portal</a> for further announcements/latest information related to this tender.
- 4. Bidder to submit this Corrigendum No. 2 along with **Annexure I and Unpriced Annexure-II** duly signed & stamped in all pages as token of acceptance and shall upload this document in the un-priced folder of the e-bid.

### Annexure- I

## STATEMENT SHOWING EXISTING VIS-À-VIS MODIFIED PROVISIONS OF TERMS & CONDITIONS, SPECIFICATIONS IN VARIOUS SECTIONS OF BIDDING DOCUMENT

SL	RFQ Section	CLAUSE NO.	Туре	EXISTING PROVISION	MODIFIED PROVISIONS
No.	Section	NO.			
1	Proforma - XI	NA	Modification	Details of Similar Work Completed During Last Five Years	Details of Similar Work Completed During Last Seven Years
2	SOR/P /BOQ	Group B Item Sl No. 74	Modification	Supply, Installation, testing and commissioning of 2 Nos. of Cast Resin Dry Type, 1000 KVA, 11/0.415 KV, 3 Phase, 50Hz, Dynll, indoor type, copper wound transformer with OFF load tap changing arrangement on HV side ± 5% in steps of 2.5%, having cable end boxes on HV side suitable for 3xlCx240 Sqmm XLPE, copper cable of 11KV grade on HT side and 6x4Cx 240sqmm XLPE, 1.1KV, Cu cable on LV side complete with all accessories. Neutral of transformer shall be earthed with 2 nos. earth electrodes and body shall be earthed with minimum 2 nos. Earth electrode. Transformer shall be mounted on suitable size of channel which is to be fixed by grouting 4nos. of bolts. The winding material should be of high conductivity electrolytic grade copper. The insulation should be Cast Resin type; Class-F. Conductor should have thermally upgraded paper insulation reinforced with fibre glass. The coil assembly is to be impregnated & cast under vacuum with epoxy resin for achieving non-hygroscopic, acid & alkali resistant insulation. The complete winding should have smooth cylindrical finish after impregnation to ensure high mechanical strength. The thickness of resin	Supply, Installation, testing and commissioning of Cast Resin Dry Type, 1000 KVA, 11/0.415 KV, 3 Phase, 50Hz, Dynll, indoor type, copper wound transformer with OFF load tap changing arrangement on HV side ± 5% in steps of 2.5%, having cable end boxes on HV side suitable for 3xlCx240 Sqmm XLPE, copper cable of 11KV grade on HT side and 6x4Cx 240sqmm XLPE, 1.1KV, Cu cable on LV side complete with all accessories. Neutral of transformer shall be earthed with 2 nos. earth electrodes and body shall be earthed with minimum 2 nos. Earth electrode. Transformer shall be mounted on suitable size of channel which is to be fixed by grouting 4nos. of bolts. The winding material should be of high conductivity electrolytic grade copper. The insulation should be Cast Resin type; Class-F. Conductor should have thermally upgraded paper insulation reinforced with fibre glass. The coil assembly is to be impregnated & cast under vacuum with epoxy resin for achieving non-hygroscopic, acid & alkali resistant insulation. The complete winding should have smooth cylindrical finish after impregnation to ensure high mechanical strength. The thickness of resin should be uniform. The insulation should be self- extinguishing type. Winding temperature scanner connected with three nos. RTDs, one for each LV winding should be provided in a metallic enclosure that is mounted on the main enclosure. The scanner should provide indication, alarm & trip contacts.

should be uniform. The insulation should be self- extinguishing type. Winding temperature scanner	Winding temperature indicator should show maximum temperature attained. The RTDs should be properly wired up
connected with three nos. RTDs, one for each LV	1 1 7 1
winding should be provided in a metallic enclosure	
that is mounted on the main enclosure. The	HT Breaker
scanner should provide indication, alarm & trip	
contacts. Winding temperature indicator should	
show maximum temperature attained. The RTDs	
should be properly wired up to the scanner	
terminals. Suitable hole with gland is required for	
control cable connecting scanner alarm/ trip	
contacts to HT Breaker.	

	PRICE BIDDING FO	RMAT				
	TENDER NO.:					
S1. No.	Description of Work: Construction of 7 blocks of G+6 New Residential Complex including Electrification, Gas & Water supply, Sanitary, Drainage, Road/Approach works & other ancillary services including supply of all materials complete in all respect at FHQ, Duliajan.	Qty	UOM	Curr.	Rate	Total
	Group A: CIVIL WORKS	x			Y	Z = X*Y
1	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	70.00	cum			0.00
2	Earth work in excavation by mechanical means (Hydralic excavator/manual means)over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth, lead upto 50m and lift upto 1.5m, as directed by Engineer - in Charge All kinds of soil	14462.07	cum			0.00
3	Earth work in excavation by mechanical means (Hydralic excavator/manual means)over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth, lead upto 50m and lift upto 1.5m, as directed by Engineer - in Charge Ordinary rock	1483.23	cum			0.00
4	Earth work in excavation by mechanical means (Hydralic excavator)/manual means in foundation trenches or drains over areas (not exceeding 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed within a lead of 50 m All kinds of soil	3513.62	cum			0.00
5	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in wateriing, lead upto to 50m and lift upto 1.5m	16532.20	cum			0.00
6	Extra for every additional lift of 1.5 m or part thereof in excavation/banking excavated or stacked materials All kinds of soil	4236.08	cum			0.00
7	Supplying and filling in plinth with sand under floors including, watering, ramming consolidating and dressing complete.	761.55	cum			0.00
8	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 leveland removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	7912.53	sqm			0.00
9	Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyriphos/Lindane emulsifiable concentrate of 20%	4972.00	Litre			0.00
10	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion):  Along external wall where the apron is not provided using chemical emulsion @ 7.5 liters / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:  With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.	1911.00	metre			0.00

11	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion):  Treatment of soil under existing floors using chemical emulsion @ one liter per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement: 2 Coarse sand) to match the existing floor:  With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.		sqm	0.00
	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	2141.30	cum	0.00
	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level 1:5:10 (1 Cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	548.67	cum	0.00
14	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) 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. up to floor five level, excluding the cost of centering, shuttering and finishing: 1:2:4 (1 Cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	174.13	cum	0.00
15	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand(zone -III) : 4 graded stone aggregate 12.5 mm nominal size)	270.40	sqm	0.00
	Applying a coat of residual petroleum bitumen of penetration VG 10 of approved quality using 1.7 kg 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.	270.40	sqm	0.00
	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone 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.		sqm	0.00
	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level: 1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)	35.00	cum	0.00
19	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete,improve workability without impairing strength and durability as per direction of the Engineer-in-charge.  All work upto plinth level	5939.94	cum	0.00
20	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete,improve workability without impairing strength and durability as per direction of the Engineer-in-charge.  All work plinth level upto floor V level	12993.28	cum	0.00
21	Extra for R.C.C./ B.M.C/ R.M.C. work above floor V level for each four floors or part thereof.	4499.90	cum	0.00
22	Extra for providing richer mixes at all floor levels. Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum)	5860.58	cum	0.00

23	Centring and shuttering including strutting, propping etc. and removal of form for:removal of form for: Foundations, footings, bases of columns including beams etc. for mass concrete	2192.66	sqm	0.00
14	Centring and shuttering including strutting, propping etc. and removal of form for: removal of form for: Walls ( any thickness) including attached pilasters, butteresses, plinth and string courses etc.	33088.28	sqm	0.00
25	Centring and shuttering including strutting, propping etc. and removal of form for:removal of form for: Suspended floors, roofs, landings, balconies and access platform	35562.51	sqm	0.00
26	Centring and shuttering including strutting, propping etc. and removal of form for:removal of form for: Shelves ( Cast in situ)	459.84	sqm	0.00
27	Centring and shuttering including strutting, propping etc. and removal of form for:removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilevers	33931.21	sqm	0.00
28	Centring and shuttering including strutting, propping etc. and removal of form for:removal of form for: Columns, pillars, piers, abutments, posts and struts	17696.79	sqm	0.00
29	Centring and shuttering including strutting, propping etc. and removal of form for:removal of form for: Stairs,(excluding landings) except spiral-staircasess.	804.30	sqm	0.00
30	Centring and shuttering including strutting, propping etc. and removal of form for:removal of form for: Weather shade,chajjas,corbels etc inc	1115.55	sqm	0.00
31	Providing, hoisting and fixing upto floor five level precast reinforced cement concrete in lintels, beams and bressumers including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement: 3 fine sand) on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	492.66	cum	0.00
32	Providing, hoisting and fixing upto floor five level precast reinforced cement concrete in lintels, beams and bressumers including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement: 3 fine sand) on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	36.38	cum	0.00
	Steel Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo-Mechanically Treated bars of grade Fe 500 D or more	1055248.44	Kg	0.00
	Steel Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete above plinth level Thermo-Mechanically Treated bars of grade Fe 500 D or more	2305944.06	Kg	0.00
35	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 centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits.  50 mm thick		sqm	0.00
36	Add or deduct for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	5733.40	metre	0.00
٧/	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.	70.00	cum	0.00
38	Brick work with common burnt clay FPS ( non modular )bricks of class designation 75 in foundation and plinth in: Cement mortar 1:4( 1 cement : 4 coarse sand )	8.00	cum	0.00
39	Brick work with common burnt clay FPS ( non modular ) bricks of class designation 75 in Superstructure above plinth upto floor V level in all shapes and sizes in cement mortar 1:6 (1 cement : 6 coarse sand) Cement mortar 1:6(1 cement : 6 coarse sand)	8050.58	cum	0.00
40	Half brick masonry with common burnt clay FPS ( non modular ) bricks of class designation 7.5 in Superstructure above plinth upto floor V level Cement mortar 1:4 (1 cement : 4 coarse sand)	20578.62	sqm	0.00

41	Extra for providing and placing in position 2 Nos. 6mm dia MS bars at every 3rd course of half brick masonry	20559.42	sqm		0.00
42	Providing and fixing 18 mm thick gang saw cut mirror polished, machine cut for kitchen platforms, vanity counters facias and fimilar locations of required size of approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement: 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing etc. complete at all levels. Granite of any colour and shade Area of slab over 0.50 sqm	1073.19	sqm		0.00
43	Extra for providing edge moulding to 18mm thick marble stone counters, Vanities etc. over Item No. 8.2 including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge Granite work		Metre		0.00
44	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.complete.	480.80	Metre		0.00
45	Extra for providing opening of required size & shape for wash basins/kitchen sink in kitchen platform, vanity counters and similar location in marble/stone work including necessary holes for pillar taps etc .including rubbing and polishing of cut edges etc. complete.		each		0.00
46	Stone tile (polished) work for wall lining over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete. 8 mm thick Granite of any colour and shade	780.14	sqm		0.00
47	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 coarse 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. Polished Granite stone slab jet black, cherry Red , Elite Brown, Cat Eye or equivalent	5858.16	sqm		0.00
48	Providing and fixing dry cladding upto 10 metre heights with 30mm thick gang saw cut stone with (machine cut edges) of uniform colour and size upto 1mx1m, fixed to structural steel frame work and/ or with the help of cramps, pins etc. and sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineer-in-charge. (The steel frame work, stainless steel cramps and pins etc. shall be paid for separately). Red sand stone - 30mm thick gang saw cut stone		sqm		0.00
49	Providing and fixing dry cladding upto 10 metre heights with 30mm thick gang saw cut stone with (machine cut edges) of uniform colour and size upto 1mx1m, fixed to structural steel frame work and/ or with the help of cramps, pins etc. and sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineer-in-charge. (The steel frame work, stainless steel cramps and pins etc. shall be paid for separately). White sand stone - 30mm thick gang saw cut stone		sqm		0.00

50	Providing and fixing structural steel frame (for dry cladding with 30 mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square/ rectangular tube in the required pattern as per architectural drawing, including cost of cutting, bending, welding etc. The frame work shall be fixed to the wall with the help of M.S. brackets/ lugs of angle iron/ flats etc. which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement :2 coarse sand :4 graded stone aggregate 20 mm nominal size) of size 300x230x300 mm, including cost of necessary centring and shuttering and with approved expansion hold fasteners on CC/RCC surface, including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding, the steel work will be given a priming coat of Zinc primer as approved by Engineerin- charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid for separately and nothing extra shall be paid).	10500.00	kg		0.00
51	Providing and fixing adjustable stainless steel cramps of approved quality, required shape and size, adjustable with stainless steel nuts, bolts and washer (total weight not less than 260 gms), for dry stone cladding fixed on frame work at suitable location, including making necessary recesses in stone slab, drilling required holes etc complete as per direction of the Engineer-in-charge.	21000.00	each		0.00
52	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position: Second class teak wood	49.14	Cum		0.00
53	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge Second class teak wood 35 mm thick shutters	1270.08	sqm		0.00
54	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 panelled or panelled and glazed shutters 25 mm to 40 mm thick: Second class teak wood	1270.08	sqm		0.00
55	Providing and fixing ISI marked flush door shutters 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. 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	1764.00	sqm		0.00
56	Providing and fixing ISI marked flush door shutters 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. 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	10.50	sqm		0.00
57	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)	1774.50	sqm		0.00
5.8	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws: 35 mm thick shutters with ISI marked M.S. pressed butt hinges bright finished of required size Second class teak wood	899 64	sqm		0.00
	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding	29158.29	kg		0.00
60	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS: 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.		each		0.00

61	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: 300x16mm	510.00	each		0.00
62	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 nuts and screws etc. complete- 250 X 10 mm	2554.00	each		0.00
63	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 nuts and screws etc. complete-200X 10 mm	2554.00	each		0.00
64	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 nuts and screws etc. complete-150X 10 mm	70.00	each		0.00
65	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 nuts and screws etc. complete-125 mm	5108.00	each		0.00
66	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 nuts and screws etc. complete-75 mm	70.00	each		0.00
67	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. Twin rubber stopper	2554.00	each		0.00
68	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of Aluminium lever handles with necessary screws etc. complete (best make of approved quality)	2044.00	each		0.00
69	Providing and fixing factory made PVC door frame of size 50x47 mm with a wall thickness of 5 mm. made out of extruded 5 rigid PVC foam sheet mitred at corners and joined with 2 Nos. of 150 mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19 mm M.S. squire tube of 19 guage, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size complete as per manufactures specification and direction of Engineer-in-charge	2/199 75	metre		0.00
70	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm 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. 30 mm thick prelaminated PVC door shutters	795.38	Sqm		0.00
71	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete. With 12 mm mild steel U beading	1576.40	sqm		0.00

72	Providing wood work in frames of false ceiling, partitions etc. sawn and fixed in position with necessary stainless	9.00	cum		0.00
12	steel screws etc.Kiln seasoned and chemically treated hollock wood	9.00	cuiii		0.00
73	Providing and fixing cup board shutters 25 mm 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 25 mm wide x12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of the Engineer-in-Charge	2540.16	sqm		0.00
74	Providing and fixing Pre-laminated medium density fibre board IS: 14587:1998 marked, with one side decorative lamination 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). Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	3024.00	sqm		0.00
75	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	2016.00	each		0.00
76	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete. Double strip (horizontal type)	3024.00	each		0.00
77	Structural steel work in single section fixed without connecting plate including cutting hoisting, fixing in position & applying priming coat of approved steel primer all complete.	700.00	kg		0.00
78	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40xmm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer. Using M.S. angels 40x40x6mm for diagonal braces.	58.80	sqm		0.00
79	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 27.5cm long wire springs grade No.2 and M.S. top cover of required thickness for rolling shutters. 80x1.25 mm M.S. laths with 1.25 mm thick top cover	26.01	sqm		0.00
80	Providing and fixing ball bearing for rolling shutters.	8.00	each		0.00
81	Extra for providing grilled rolling shutters manufactured out of 8 mm dia. M.S. bar instead of laths as per design approved by Engineer-in-Charge. ( area of grill to be measured.)	26.01	sqm		0.00
82	Providing and fixing pressed steel door frames conforming to IS: 4351,manufactured from commercial mild steel sheet of 1.60 mm thickness,including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strikeplate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineerin-charge: Profile C Fixing with adjustable lugs with split end tail to each jamb	28.40	metre		0.00
83	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 as per standard drawing.	1011.00	each		0.00
84	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 structural steel etc. as required In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	205.00	Kg.		0.00

85	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 structural steel etc. as required In gratings, frames, guard bar, ladders, balcony and staircase railings, brackets, gates and similar works		Kg.		0.00
86	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, i/c 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.).	53118.45	Kg.		0.00
87	62 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone agrregate 20 mm nominal size) and top layer 12 mm thick Hardcrete cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 stone aggregate 6 mm nominal size) by volume with which Hardcrete hardening compound of Snowcem India Ltd. or equivalent is mixed @ 2 litre Hardcrete per 50kg of cement including cement slurry, but excluding the cost of nosing of steps etc. complete	4813.00	sqm		0.00
88	Cement plaster skirting (upto 30cm height) with cement morter 1:3 (1 cement 3 coarse sand) finished with a floating coat of neat cement. 18mm thick	921.56	sqm		0.00
89	Providing and fixing glass strips in joints of terrazo/ cement concrete floors. 40 mm wide and 4 mm thick	12746.25	m		0.00
90	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1: 4 (1 cement : 4 coarse sand) :25 mm thick	160.60	sqm		0.00
91	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	58.50	sqm		0.00
92	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	8.00	metre		0.00
93	Extra for Kota stone/ sand stone in treads of steps and risers using single length up to 1.05 metre.	8.00	sqm		0.00
94	Providing and fixing Ist quallity ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacture) of approved make in all colours, shades except burgundy, bottle green, black 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 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	7722 69			0.00
95	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (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, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement: 4 Coarse sand), including pointing the joints with white cement and matching pigments etc.,complete.		Sqm		0.00
96	Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 80x80 cm		Sqm		0.00

97	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 ofsteps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 80x80 cm		Sqm		0.00
98	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. Size of Tile 80x80 cm		Sqm		0.00
99	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 coarse 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: Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	5858.16	Sqm		0.00
100	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.		each		0.00
101	Providing and fixing on wall face 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, (i) Single socketed pipes. 75 mm diameter		metre		0.00
102	Providing and fixing on wall face 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, (i) Single socketed pipes. 110 mm diameter		metre		0.00
103	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 Coupler 75 mm diameter		each		0.00
104	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 Coupler 110 mm diameter		each		0.00
105	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 Single tee without door -75x75x75 mm		each		0.00
106	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 Single tee without door -110x110x110 mm		each		0.00
107	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 Bend 87.5°-75 mm bend		each		0.00

108	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 Bend 87.5°-110 mm bend		each	0.00
109	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand)and making good the wall etc. complete. 75 mm	4207.00	each	0.00
110	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand)and making good the wall etc. complete. 110 mm	4816.00	each	0.00
111	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture spintone/cosmos / Hexa or equivalent 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 (Spintone / Cosmos/hexa) 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.	1809.36	sqm	0.00
112	12mm cement plaster of mix: 1:4 ( 1 cement : 4 fine sand)	58836.89	sqm	0.00
113	15mm cement plaster of mix: 1:4 ( 1 cement : 4 fine sand)	45263.57	sqm	0.00
114	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	25790.78	sqm	0.00
115	6mm cement plaster to ceiling of mix: 1:3 (1 cement : 3 fine sand)	35607.66	sqm	0.00
	Extra for providing and mixing water proofing material in cement plaster work in proportion ecommended by the manufacturers (Payment shall be made per bag of 50 kg cement used in the mix).	2500.00	Bag	0.00
117	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	15258.97	SQM	0.00
118	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	90276.36	SQM	0.00
119	White washing with lime to give an even shade New work(three or more coats)	38542.06	sqm	0.00
120	Colour washing such as green, blue or buff to give an even shade New work (two or more coats) with a base coat of white washing with lime	519.46	sqm	0.00

121	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coats on new work	90276.36	sqm	0.00
122	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	4435.20	sqm	0.00
123	Applying priming coat With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	6073.20	sqm	0.00
124	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works	6004.75	sqm	0.00
125	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat)	6004.75	sqm	0.00
126	Finishing walls with water proofing cement paint of required shade New work (Two or more coats applied @ 3.84 kg/10 sqm)	7087.50	sqm	0.00
127	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade Two or more coats on new work.	9043.95	sqm	0.00
128	French spirit polishing Two or more coats on new works including a coat of wood filler complete	9246.22	sqm	0.00
129	6 mm plaster on cement concrete or reinforced cement concrete work with white cement based polymer modified self curing mortar of approved make as per the direction of Engineer-In-Charge.	2934.40	sqm	0.00
130	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 up to bottom of pile cap). 500 mm dia piles	14448.00	Rm	0.00
131	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge/Anchor piles method 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. Group of two or more piles upto 50 tonne Safe capacity Initial test (Test Load 2.5 times the Safe capacity)	21.00	Per Test	0.00
132	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge/Anchor piles method 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. Group of two or more piles upto 50 tonne Safe capacity Routine test (Test Load 1.5 times the Safe capacity)	21.00	Per Test	0.00
133	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 Upto 50 tonne capacity pile	21.00	Per Test	0.00
134	Integrity testing of Pile using Low Strain/ Sonic Integrity Test/ Sonic Echo Test method in accordance with IS 14893 including surface preparation of pile top by removing soil, mud, dust & chipping lean concrete lumps etc. and use of computerised equipment and high skill trained personal for conducting the test & submission of results, all complete as per direction of Engineer-in-charge	1806.00	Per Test	0.00

135	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, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and panelling to be paid for separately):For fixed portion. Powder coated aluminium (minimum thickness of powder coating 50 micron)	32308.74	Kg.		0.00
136	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)Powder coated aluminium (minimum thickness of powder coating 50 micron)	18418.73	Kg.		0.00
137	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):  With float glass panes of 5.50 mm thickness (weight not less than 12.50 kg/ sqm)	1221.23	Sqm		0.00
138	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	8179.00	mtr.		0.00
139	Providing and fixing stainless steel (SS-304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete. 510X19mm	85.00	Each		0.00
140	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-incharge. (Only weight of grill to be measured for payment).	56023.97	kg		0.00
141	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portion of toilet and kitchen and the like consisting of:  (i) Ist 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) Ilnd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.  (iii) Illrd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area.  (iv) IVth 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).	2085.94	Sqm		0.00

142	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc 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 300mm height including cleaning the surface before treatment.  (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse 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 coarse 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 2.75kg/ 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 coarse 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 3mm 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 : With average thickness of 120mm and minimum thickness at khurra as 65 mm.	5809.08	Sqm		0.00
143	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 thicknessof 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.	949.26	Sqm		0.00
144	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, including flush pipe, 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: WC pan ISI marked white solid plastic seat and lid	339.00	Each		0.00
1/15	Providing and fixing wash basin with C.I. brackets, 15 mm dia CP Brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required:- (a) White Vitreous China Wash basin size 550x400 mm with a 15 mm CP Brass single hole basin mixer		Each		0.00
146	Providing and fixing Stainless Steel A ISI 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: With drain Board 510x1040 mm bowl depth 200 mm with PVC waste Pipe 40 mm dia		Each		0.00
147	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	506.00	Each		0.00
148	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe 32 mm dia	171.00	Each		0.00

149	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 40mm long screws,rawl plugs etc., complete	506.00	Each	0.00
150	Providing and fixing uplasticised PVC connection pipe with brass unions: 45 cm length 15 mm nominal bore	2021.00	Each	0.00
151	Providing and Fixing shower rose with 15 or 20mm inlet 150mm diameter	337.00	Nos.	0.00
152	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931: a)15 mm nomial bore	4.00	Nos.	0.00
153	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (kitchen) 15 mm nominal bore	169.00	Nos.	0.00
154	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	2524.00	Nos.	0.00
155	Providing & Fixing CP Brass Single Lever Telephonic Wall Mixer of quality and make as approved by Engineer in Charge. (a) 15 mm Nominal Bore	336.00	Each	0.00
156	Providing and fixing 600x450 mm beveled 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.	507.00	Each	0.00
157	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 suports, 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. 20 mm dia	3387.00	Metre	0.00
158	Providing and fixing G.I. pipes complete withh G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall and terrace- 20mm dia	565.00	Metre	0.00
159	Providing and fixing G.I. pipes complete withh G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall and terrace- 25mm dia	1669.00	Metre	0.00
160	Providing and fixing G.I. pipes complete withh G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall and terrace- 32mm dia	1064.00	Metre	0.00
161	Providing and fixing G.I. pipes complete withh G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall and terrace- 40mm dia	1120.00	Metre	0.00
162	Providing and fixing G.I. pipes complete withh G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall and terrace- 50mm dia	4935.00	Metre	0.00
163	Providing and fixing G.I. pipes complete withh G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall and terrace-65mm dia	1820.00	Metre	0.00
164	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: 50 to 80 mm nominal bore	28.00	Nos.	0.00
165	Providing and fixing gun metal gate valve with C.I. wheel of approved quality(screwed end )-20 mm nominal bore	673.00	each	0.00
166	Providing and fixing gun metal gate valve with C.I. wheel of approved quality(screwed end )-25 mm nominal bore	4.00	each	0.00
167	Providing and fixing gun metal gate valve with C.I. wheel of approved quality(screwed end )-32 mm nominal bore.	1.00	each	0.00
168	Providing and fixing gun metal gate valve with C.I. wheel of approved quality(screwed end )-40 mm nominal bore	57.00	each	0.00
169	Providing and fixing gun metal gate valve with C.I. wheel of approved quality(screwed end )-50 mm nominal bore	113.00	each	0.00
170	Providing and fixing gun metal gate valve with C.I. wheel of approved quality(screwed end )-65mm nominal bore	74.00	each	0.00

171	Providing and fixing gun metal gate valve with C.I. wheel of approved quality(screwed end )-80 mm nominal bore	10.00	each		0.00
172	Providing and fixing gun metal non-return valve of approved quality (screwed end ) Providing and fixing gun metal non-return valve of approved quality (screwed end )65 mm nominal bore Horizontal	21.00	each		0.00
173	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 :2coarse sand :4 graded stone aggregate 20mm nominal size) including finishing complete so as to make it leak proof.		each		0.00
174	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. Single Push fit coupler-75 mm diameter		Nos.		0.00
175	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. Single Push fit coupler-110 mm diameter		Nos.		0.00
176	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. Shoe (Plain)-75 MM DIA		each		0.00
177	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. Shoe (Plain)-110 mm dia		each		0.00
178	Providing and Fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less then 440 grams.	465.00	Nos.		0.00
179	Dismantling and Demloition of Existing Residential Quarters at site including all dismantling works of civil, internal plumbing, electrical, existing fencing, Garbage Bin, Septic tanks, roads, drains, street lights, UG cables etc including disposal of unserviceable materials with all leads and lifts complete No Of Storeys - Ground Floor Covd Area of each quarter = 175 sqm aprox		Each		0.00
180	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. Beyond 30 cm girth upto and including 60 cm girth		Nos.		0.00
181	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. Beyond 60 cm girth upto and including 120 cm girth		Nos.		0.00
182	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. Beyond 120 cm girth upto and including 240 cm girth		Nos.		0.00
183	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres.		Sqm		0.00
184	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge. With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30	1548 00	cum		0.00

185	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achievethe desired density, complete as per specifications and directions of Engineer-in-Charge.	580.50	cum	0.00
186	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber,finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately) Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer	1354.50	cum	0.00
187	Providing and fixing in position pre-moulded joint filler in expansion joints (Payments shall be made per cm depth per cm width per metre length).	7740.00	Metre	0.00
	Providing and laying in position bitumen hot sealing compound for expansion joints etc. (payment shall be made per cm depth per cm width per metre length)	7740.00	Metre	0.00
189	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	76.50	cum	0.00
190	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in- Charge. 60mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	1000.00	Sqm	0.00
	80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.	4100.00	sqm	0.00
192	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level: 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size)	319.54	cum	0.00
193	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement: 1:1.5:3 (1 cement: 1.5 coarse sand(zone-III): 3 graded stone aggregate 20 mm nominal size)	76.32	cum	0.00

	87.98	Cum			0.00
	1479.29	cum			0.00
as of footpath of various sizes, of M-25 grade cement concrete for RCC work, including g, reinforcement of 8 mm dia TMT bars of Fe 500 grade @ maximum 100mm c/c on unning on finished surface, properly encased on all edges with 1.6 mm thick, 100 mm over priming coat, reinforcement to be welded at edges g 2 Nos. 12 mm dia bar for hooks etc i/c cost of cartage, all leads & lift, handling at site	88.20	cum			0.00
		m			0.00
ortion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete 450 mm	50.00	m			0.00
		m			0.00
ned with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand)	376.00	sqm			0.00
oles from different strata, preparing and submitting strata chart/ bore log, including all equipments, tools, plants & machineries required for the job, all complete as per		Metre			0.00
pipe of required dia, conforming to IS: 12818, including required hire and labour	120.00	mtr			0.00
	47.70	Cum			0.00
& leveling gravels of size range 5 mm to 10 mm, in the recharge pit, over the existing	43.20	Cum			0.00
	43.20	Cum			0.00
	12.00	Cum			0.00
	4.00	Each			0.00
	324.00	sqm			0.00
	arse sand)  purnt clay FPS ( non modular ) bricks of class designation 75 in Superstructure above all shapes and sizes in Cement mortar 1:4(1 cement : 4 coarse sand )  position 100 mm thick factory made machine batched & machine mixed Precast RCC no of footpath of various sizes, of M-25 grade cement concrete for RCC work, including ig, reinforcement of 8 mm dia TMT bars of Fe 500 grade @ maximum 100mm c/c on unning on finished surface, properly encased on all edges with 1.6 mm thick , 100 mm of over priming coat , reinforcement to be welded at edges g 2 Nos. 12 mm dia bar for hooks etc i/c cost of cartage, all leads & lift, handling at site action of Engineer-in-Charge.  pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : 300 mm pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : 300 mm pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete 450 mm pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete 600 mm pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete 600 mm pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete 600 mm pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete 600 mm pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement : 2 fine s	arse sand)  1479.29	arse sand)  1479.29 cum  150.00 mm  150.00	arse sand)  As PPS (non modular ) bricks of class designation 75 in Superstructure above all shapes and sizes in Cement mortar 1:4(1 cement: 4 coarse sand)  all shapes and sizes in Cement mortar 1:4(1 cement: 4 coarse sand)  all shapes and sizes in Cement mortar 1:4(1 cement: 4 coarse sand)  as of footpath of various sizes, of M-25 grade cement concrete for RCC work, including gore referencement of 8 mm dia TMT bars of Fe 500 grade @ maximum 100mm c/c on unning on finished surface, properly encased on all edges with 1.6 mm thick, 100 mm lover priming coat, reinforcement to be welded at edges g 2 Nos. 12 mm dia bar for hooks etc i/c cost of cartage, all leads & lift, handling at site exciton of Engineer-in-Charge.  As PPS class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete : 300 mm  bressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete 450 mm  bressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete 600 mm  bressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete 600 mm  bressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete 600 mm  bressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete 600 mm  bressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of portion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete 600 mm  bressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of	arse sand)  arse sand)  arse sand)  arse sand)  arse sand states in Cement mortar 1:4(1 cement : 4 coarse sand)  1479.29  cum  1479.20  cum  150.00  m  150.00  m

209	Carriage of material by mechanical transport including loading, unloading and stacking Earth 6 to 25 Km.	10533.50	cum		0.00
210	Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete.	10533.50	cum		0.00
211	Trenching in ordinary soil up to a depth of 60 cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly levelling within a lead of 50 m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or / and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure).	4705.20	cum		0.00
	Supplying and stacking of good earth at site including royalty and carriage upto 5 km lead complete (earth measured in stacks will be reduced by 20% for payment). Screened through sieve of I.S. designation 20mm	941.04	cum		0.00
213	Rough dressing the trenched ground including breaking clods.	7842.00	sqm		0.00
214	Fine dressing the ground	7842.00	sqm		0.00
215	Spreading of manure or/and good earth in required thickness	941.04	cum		0.00
216	Providing & laying Selection no. 1 grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with required tools wooden and than rolling the surface with light roller make the surface smoothen and light watering the same maintenance for 30 days or more till the grass establish properly, as per direction of officer in charge	6273.60	sqm		0.00
217	Preparation of beds for hedging and shrubbery by excavating 60cm deep and trenching the excavated base to a further depth of 30cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20%: one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, levelling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and levelling as directed, within a lead of 50m lift upto 1.5 m complete (cost of sludge, manure or extra earth to be paid for sepa-rately).	235.26	cum		0.00
218	Digging holes in ordinary soil and refilling the same with the exca-vated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20%: 1part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth, if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately): Holes 60 cm dia, and 60 cm deep.	390.00	each		0.00
219	Providing and fixing M.S. flat iron tree guard 60cm dia. and 2m height above ground level formed of 4 nos. 25x6mm and 8 nos. 25x3mm vertical M.S. flats rivetted to 3 nos. 25x6mm M.S. flat iron rings in two halves, bolted together with 8mm dia. and 30mm long bolts including painting two coats with paint of approved brandand manu-facture over a coat of priming, complete in all respects.		each		0.00
220	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.External works-20 mm dia	10.00	Metre		0.00
221	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.External works-25 mm dia	10.00	Metre		0.00
222	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.External works-32 mm dia	10.00	Metre		0.00
223	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.External works-40 mm dia	10.00	Metre		0.00
224	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.External works-50 mm dia	10.00	Metre		0.00

225	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.External works-65 mm dia	350.00	Metre		0.00
226	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.External works-80 mm dia	750.00	Metre		0.00
227	Providing fixing CI Sluice Valve (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid seperately-100 mm diameter-Class II	2.00	Each		0.00
228	Providing fixing CI Sluice Valve (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid seperately-150 mm diameter-Class II	5.00	Each		0.00
229	Providing fixing CI Sluice Valve (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid seperately-200 mm diameter-Class II	5.00	Each		0.00
230	Providing fixing CI Sluice Valve (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid seperately-250 mm diameter-Class II	5.00	Each		0.00
231	Providing fixing CI Sluice Valve (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid seperately-300 mm diameter-Class II	5.00	Each		0.00
232	Constructing masonry Chamber 30x30x60 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse 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), i/c 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 : With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	18.00	Nos		0.00
233	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse 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), i/c 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 : With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	10.00	Nos.		0.00
234	Constructing masonry Chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse 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 ), i/c 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 : With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	1.00	Nos.		0.00
235	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329:100 mm dia Ductile Iron Class K-9 pipes	750.00	Metre		0.00
236	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329:150 mm dia Ductile Iron Class K-9 pipes	600.00	Metre		0.00
237	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329:200 mm dia Ductile Iron Class K-9 pipes	20.00	Metre		0.00
238	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329:250 mm dia Ductile Iron Class K-9 pipes	20.00	Metre		0.00
239	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329: 300 mm dia Ductile Iron Class K-9 pipes	20.00	Metre		0.00
240	Providing and laying D.I. specials of class K-12 suitable for push-on jointing as per IS: 9523: Up to 600 mm dia	10.58	Quintal		0.00

741	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket: 100 mm dia pipes	94.00	Each		0.00
1 /4/	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket :150 mm dia pipes	75.00	Each		0.00
1 143	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket :200 mm dia pipes	3.00	Each		0.00
144	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket: 250 mm dia pipes	3.00	Each		0.00
745	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket: 300 mm dia pipes	3.00	Each		0.00
246	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, anddressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidatingeach deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m: All kinds of soil	5.00	Metre		0.00
247	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, anddressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidatingeach deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m: Pipes, cables etc, not exceeding 80 mm dia.	1410.00	Metre		0.00
	Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre). All kinds of soil	352.50	Metre		0.00
1 /49	Extra for excavating trenches for pipes, cables, etc, in all kinds of soil for depth exceeding 3 m in depth, but not exceeding 4.5 m. (Rate is over corresponding basic item for depth upto 1.5 metre.)	70.50	Metre		0.00
	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W./RCC pipes including bed concrete as per standard design: 150 mm dia	860.00	Metre		0.00
	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W./RCC pipes including bed concrete as per standard design: 250 mm dia	550.00	Metre		0.00
252	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536 : 150 mm dia	5.00	Metre		0.00
253	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536 : 200 mm dia	5.00	Metre		0.00
	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 100 mm diameter	5.00	Metre		0.00
	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 150 mm diameter	5.00	Metre		0.00
256	Providing and fixing square-mouth S.W. gully trap class SP-1 complete withh C.I. grating brick masonry chamber withh water tight C.I. cover withh frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 100x100 mm size P type withh common burnt clay F.P.S. (non modular) bricks of class designation 7.5	203.00	Each		0.00
	Providing and laying non-pressure NP2 class (light duty) R.C.C pipes jointed withh stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete 150 mm dia. R.C.C. pipe	1156.70	Metre		0.00

258	Providing and laying non-pressure NP2 class (light duty) R.C.C pipes jointed withh stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete 250 mm dia. R.C.C. pipe	550.00	Metre		0.00
259	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) withh R.C.C. top slab withh 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick withh cement mortar 1:3 (1 cement : 3 coarse sand) finished withh floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size) finished withh a floating coat of neat cement complete as per standard design :Inside size 90x80 cm and 45 cm deep including C.I. cover withh frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :Withh common burnt clay F.P.S. (non-modular) bricks of class designation 7.5	98.00	Nos.		0.00
260	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) withh R.C.C. top slab withh 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick withh cement mortar 1:3 (1 cement : 3 coarse sand) finished withh floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size) finished withh a floating coat of neat cement complete as per standard design :Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :With common burnt clay F.P.S. (non-modular ) bricks of class designation 7.5	1.00	Nos.		0.00
261	Extra for depth for manholes :Size 90x80 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	49.00	Metre		0.00
262	Extra for depth for manholes :Size 120x90 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	Metre		0.00
263	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement: 4 Coarse sand), in side cement plaster 12 mm thick withh cement mortar 1:3 (1 cement: 3 coarse sand) finished withh a floating coat of neat cement, foundation concrete 1:3:6 mix (1 Cement: 3 coarse sand: 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 Cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished withh a floating coat of neat cement all complete as per stander design. 0.91 m deep withh S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 Kg. fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	10.00	Nos.		0.00
264	Extra depth for circular type manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5.00	Metre		0.00

265	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top withh 75 class designation F.P.S. brick in cement mortar 1:4 (1 Cement :4 Coarse sand inside cement plaster 12 mm thick withh cement mortar 1:3 (1 cement : 3 Coarse sand) finished withh a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand; 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement; 2 coarse sand : 4 graded stone aggregate 20 mm nominal size finished withh a floating coat of neat cement all complete as per standard design.1.68m deep withh SFRC Cover and frame (Heavy duty HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 Kg. fixed in cement concrete 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) with common burnt clay F.P.S. (non modular) bricks of class designation 7.5		Nos.		0.00
266	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5.00	Metre		0.00
267	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :2.30 m deep with SFRC Cover and frame (heavy duty HD- 20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	8.00	Nos.		0.00
268	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30 m : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	4.00	Metre		0.00
269	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	35.00	Nos.		0.00
270	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand ) with precast R.C.C. vertical grating complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5.00	Nos.		0.00
271	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame and vertical grating complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5.00	Nos.		0.00
272	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse 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 coarse 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 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: Inside dimensions 455x610 mm and 45 cm deep for single pipe line :With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	Each		0.00

273	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse 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 coarse 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 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets: With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	Each	0.00
274	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse 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 coarse 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 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets: With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	Each	0.00
275	Extra for depth beyond 45 cm of brick masonry chamber :For 455x610 mm size With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	Metre	0.00
276	Extra for depth beyond 45 cm of brick masonry chamber :For 500x700 mm size With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	Metre	0.00
277	Extra for depth beyond 45 cm of brick masonry chamber :For 600x850 mm size With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	Metre	0.00
278	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS: 10910, on 12 mm dia steel bar conforming to IS: 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	280.00	Each	0.00
279	Providing and fixing SS Magic eye in Enterance Door shutter	168.00	Each	0.00
280	Providing and fixing Factory made Modular kitchen cabinets with all SS accessies as per drawing complete .	1083.60	Sqm	0.00
281	Providing and fixing chicken wire mesh at junction of RCC and Brickwork	10924.45	Sqm	0.00
282	Providing Stone finish Texture finish coating mixed with polymer bonding agent min 2 mm thickness in single coat on external walls at all heights and levels complete as per manufacturer instructions Unistone / Heritage / Luxture or equivalent	25889.22	Sqm	0.00
283	Providing and laying PVC (SWR) pipes single socketed, in any length with rubber ring joints,including all accessories bends, Tee sockets laid in trenches or in floor (Type B)- 110mm dia	1657.00	metre	0.00
284	Providing and laying PVC (SWR) pipes single socketed, in any length with rubber ring joints,including all accessories bends, Tee sockets laid in trenches or in floor (Type B)-75mm dia	675.00	metre	0.00

oviding and laying PVC (SWR) pipes sin-gle socketed in any length with rubber ring joints including all tessories bends, Tee sockets ,cowls,couplers , clips etc fixed to walls (Type B) - 110mm dia	3291.00	metre		0.00
oviding and laying PVC (SWR) pipes sin-gle socketed in any length with rubber ring joints including all cessories bends, Tee sockets ,cowls,couplers , clips etc fixed to walls ( Type B )-75 mm dia	71.00	metre		0.00
oviding and fixing PVC (SWR) `P' trap 110 mm	338.00	Each		0.00
oviding and fixing CP towel rail complete with brackets fixed to wooden cleats with CP brass screws with neealed fittings 600 mm long	337.00	Each		0.00
oviding and fixing CP Brass soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with neealed fitting arrangements, weighing not less than 106 gms.	505.00	Nos.		0.00
oply & Fixing of CP Brass Chrome Finish Health Faucet with 1m long tube and wall hook of Approved make	336.00	Each		0.00
oviding and fixing SS Grating 125 Circular type 125 mm nominal dia with 25 mm waste hole	338.00	Nos.		0.00
oplying and fixing of CP Sheet glass shelf assembly consisting of 8 mm thick sheet glass shelf 30x 30cms with romium plated bracket guard	336.00	Nos.		0.00
oviding Stone finish Texture finish coating mixed with polymer bonding agent min 2 mm thickness in single at on external walls at all heights and levels complete as per manufacturer instructions Bakelite hylam (ritage or equivalent)	4280.20	sqm		0.00
oviding Decorative Gate lights with Led Bub 20 W including 1.5 sqmm electrical wiring in PVC Conduit mplete	9.00	each		0.00
oplying and plantation of Trees including excavation and backfilling complete	600.00	Each		0.00
oplying and plantation of Bottle Palm Trees (14-15 ft high) including excavation and backfilling complete	100.00	Each		0.00
oplying and plantation of Fox Palm Trees (7-8 ft high) including excavation and backfilling complete	50.00	Each		0.00
oplying and plantation of Shrubs Upto 500 mm height including excavation and backfilling complete	500.00	Each		0.00
oplying and plantation of Hedge.Upto 300 mm height including excavation and backfilling complete	200.00	Each		0.00
oplying and plantation of Plants.Upto 100 mm height including excavation and backfilling complete	300.00	Each		0.00
oply and Installation of RCC Garden Bench 900 mm length complete to the satisfaction of Engineer in Charge	8.00	Each		0.00
oply and Installation of Oudoor play station of aprox size 30 $\times$ 20 $\times$ 18 ft in Moulded PVC complete as per sign to the satisfaction of Engineer in Charge	2.00	Each		0.00
	essories bends, Tee sockets ,cowls,couplers , clips etc fixed to walls (Type B )- 110mm dia  viding and laying PVC (SWR) pipes sin-gle socketed in any length with rubber ring joints including all sessories bends, Tee sockets ,cowls,couplers , clips etc fixed to walls (Type B)-75 mm dia  viding and fixing PVC (SWR) 'P' trap 110 mm  viding and fixing CP towel rail complete with brackets fixed to wooden cleats with CP brass screws with cealed fittings 600 mm long viding and fixing CP Brass soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with cealed fitting arrangements, weighing not less than 106 gms.  ply & Fixing of CP Brass Chrome Finish Health Faucet with 1m long tube and wall hook of Approved make viding and fixing SS Grating 125 Circular type 125 mm nominal dia with 25 mm waste hole plying and fixing of CP Sheet glass shelf assembly consisting of 8 mm thick sheet glass shelf 30x 30cms with minum plated bracket guard viding Stone finish Texture finish coating mixed with polymer bonding agent min 2 mm thickness in single to on external walls at all heights and levels complete as per manufacturer instructions Bakelite hylam (itage or equivalent) viding Decorative Gate lights with Led Bub 20 W including 1.5 sqmm electrical wiring in PVC Condult publete plying and plantation of Trees including excavation and backfilling complete plying and plantation of Bottle Palm Trees (14-15 ft high) including excavation and backfilling complete plying and plantation of Fox Palm Trees (7-8 ft high) including excavation and backfilling complete plying and plantation of Plants. Upto 300 mm height including excavation and backfilling complete plying and plantation of Plants. Upto 300 mm height including excavation and backfilling complete plying and plantation of Plants. Upto 100 mm height including excavation and backfilling complete	assories bends, Tee sockets ,cowls,couplers , clips etc fixed to walls (Type B)-110mm dia  3291.00  widing and laying PVC (SWR) pipes sin-gle socketed in any length with rubber ring joints including all essories bends, Tee sockets ,cowls,couplers , clips etc fixed to walls (Type B)-75 mm dia  71.00  widing and fixing PVC (SWR) 'P' trap 110 mm  widing and fixing CP towel rail complete with brackets fixed to wooden cleats with CP brass screws with cealed fittings 600 mm long  widing and fixing CP Brass soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with cealed fitting arrangements, weighing not less than 106 gms.  ply & Fixing of CP Brass Chrome Finish Health Faucet with 1m long tube and wall hook of Approved make  widing and fixing SS Grating 125 Circular type 125 mm nominal dia with 25 mm waste hole  plying and fixing of CP Sheet glass shelf assembly consisting of 8 mm thick sheet glass shelf 30x 30cms with  somium plated bracket guard  widing Stone finish Texture finish coating mixed with polymer bonding agent min 2 mm thickness in single to on external walls at all heights and levels complete as per manufacturer instructions Bakelite hylam ( 14280.20 (	metre assories bends, Tee sockets , cowls, couplers , clips etc fixed to walls ( Type B )- 110mm dia 3291.00 metre widing and laying PVC (SWR) pipes sin-gle socketed in any length with rubber ring joints including all 71.00 metre assories bends, Tee sockets , cowls, couplers , clips etc fixed to walls ( Type B )-75 mm dia 71.00 metre widing and fixing PVC (SWR) 'P' trap 110 mm 338.00 Each widing and fixing CP towel rail complete with brackets fixed to wooden cleats with CP brass screws with cealed fittings 600 mm long widing and fixing CP Brass soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with cealed fitting arrangements, weighing not less than 106 gms.  Ply & Fixing of CP Brass Schrome Finish Health Faucet with 1m long tube and wall hook of Approved make 336.00 Each widing and fixing SS Grating 125 Circular type 125 mm nominal dia with 25 mm waste hole 338.00 Nos. Plying and fixing of CP Sheet glass shelf assembly consisting of 8 mm thick sheet glass shelf 30x 30cms with 336.00 Nos. Widing Stone finish Texture finish coating mixed with polymer bonding agent min 2 mm thickness in single to on external walls at all heights and levels complete as per manufacturer instructions Bakelite hylam (4280.20 sqm lage or equivalent)  widing Decorative Gate lights with Led Bub 20 W including 1.5 sqmm electrical wiring in PVC Conduit plying and plantation of Trees including excavation and backfilling complete 50.00 Each plying and plantation of Bottle Palm Trees (14-15 ft high) including excavation and backfilling complete 50.00 Each plying and plantation of Fox Palm Trees (7-8 ft high) including excavation and backfilling complete 50.00 Each plying and plantation of Hedge. Upto 300 mm height including excavation and backfilling complete 50.00 Each plying and plantation of Plants. Upto 100 mm height including excavation and backfilling complete 50.00 Each plying and plantation of Plants. Upto 100 mm height including excavation and backfilling complete 50.00 Each plying and plantation of Plants. Upto	metre sessories bends, Tee sockets ,cowls,couplers , clips etc fixed to walls (Type B) - 110mm dia 3291.00 metre diding and laying PVC (SWR) pipes sin-gle socketed in any length with rubber ring joints including all essories bends, Tee sockets ,cowls,couplers , clips etc fixed to walls (Type B) -75 mm dia 71.00 metre widing and fixing PVC (SWR) 'P' trap 110 mm 338.00 Each widing and fixing CP towel rail complete with brackets fixed to wooden cleats with CP brass screws with cealed fittings 600 mm long 337.00 Each cealed fittings 600 mm long widing and fixing CP Brass soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with cealed fitting arrangements, weighing not less than 106 gms. ply & Fixing of CP Brass Schrome Finish Health Faucet with 1m long tube and wall hook of Approved make 336.00 Each widing and fixing SS Grating 125 Circular type 125 mm nominal dia with 25 mm waste hole 338.00 Nos. plyloging and fixing of CP Sheet glass shelf assembly consisting of 8 mm thick sheet glass shelf 30x 30cms with 336.00 Nos. plyloging and fixing of CP Sheet glass shelf assembly consisting of 8 mm thick sheet glass shelf 30x 30cms with 336.00 Nos. plyloging and plantalion of CP Sheet glass shelf assembly consisting of 8 mm thick sheet glass shelf 30x 30cms with 336.00 Nos. plyloging and plantation of Description of the plyloging and plantation of Brube levels complete as per manufacturer instructions Bakelite hylam (4280.20 sqm tage or equivalent) viding Decorative Gate lights with Led Bub 20 W including 1.5 sqmm electrical wiring in PVC Conduit plyloging and plantation of Trees including excavation and backfilling complete 50.00 Each plying and plantation of Bottle Palm Trees (7-8 ft high) including excavation and backfilling complete 50.00 Each plying and plantation of Hedge. Upto 300 mm height including excavation and backfilling complete 50.00 Each plying and plantation of Plants. Upto 100 mm height including excavation and backfilling complete 50.00 Each 50.00 Each 50.00 Each 50.00 Each 50.00 Each

303	WATER SUPPLY PUMPS & EQUIPMENTS AND WATER SUPPLY RISERS Domestic Water Pump (Hydropneumatic System With Fixed Speed Pumps) Providing, fixing and testing of Own Assembled variables frequency drive type skid mounted hydropneumatic system with variable speed system comprising of :- Horizontal, Single Stage centrifugal pumping set with CI stage casing and Bronze impellers with stainless steel SS shaft as per IEC standards and GJL250 cast iron suction & discharge casing, connected to TEFC ventilated induction motor of 2 pole, 2900rpm, suitable for 400/440 Volts, 3 phase, 50 Hz A.C. supply. Pressure vessel of non corrosive FRP composite construction lined with NSF and/or FDA listed material, like high density polyethylene with fully replaceable polyurethane. Air cell burst pressure of minimum of 5 times the vessel operating pressure and cycle tested for 2,50,000 cycles. No. and capacity of Pressure Vessel – 01 Nos. x 300 Ltrs Control Panel with programmable logic controller (PLC) for cyclic operation of pumps. Pump working sequence should change after every operation. PLC should also operate the Pumps on Differntial Pressure. Contractor overload relays and MCBs should confirm to IEC 898 – 1995/ specifications. Blinking indications for pumps start, trip, low level trip, health supply should be provided in the panel along with the ammeter & voltmeter. Control panel should also consist of cooling fan.Pressure switches with Differntial Pressure setting to set the required Cut in Cut Off Pressures for Automation of Pumps.GI Suction and delivery header with Butterfly valves, NRVs to be used.Complete set system to be mounted on a common base frame and shall follow following duty.Domestic Water Pumps(Set of Two Pumps One Working + One Standby) 5 HP CAPACITY	2.00	SET		0.00
	Group B : ELECTRICAL				
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. Group B	8034.00	Point		0.00
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.(2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire)	40845.00	Metre		0.00
3	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. (2 X 4 sq. mm + 1 X 4 sq. mm earth wire)	39690.00	Metre		0.00
4	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.(2 X 6 sq. mm + 1 X 6 sq. mm earth wire)	50.00			0.00
5	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.(4 X 10 sq. mm + 2 X 6 sq. mm earth wire)	2520.00	Metre		0.00
6	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required. 2 Pair	2520.00	Metre		0.00
7	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	2520.00	Metre		0.00
8	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 25 mm ( For TV /Tel )	5040.00	Metre		0.00

9	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.(Bell push)	168.00	Each	0.00
10	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. (Telephone socket outlet)	514.00	Each	0.00
11	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. (TV antenna socket outlet)	514.00	Each	0.00
12	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	1019.00	Each	0.00
13	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	672.00	Each	0.00
14	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.1 or 2 Module (75mmX75mm)	1196.00	Each	0.00
15	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	168.00	Each	0.00
	Supplying and fixing suitable size GI box with modular plate andcover in front on surface or in recess, including	2555.00	Each	
16	providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.			0.00
17	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	1806.00	Each	0.00
18	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point ( without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. Group B	112.00	Point	0.00
19	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) 6 way, Double door (Machine Room Guard Room, ESS)	11.00	Each	0.00
20	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) 12 way, Double door ( Stilt )	14.00	Each	0.00
21	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note: Vertical type MCB TPDB is normally used where 3 phase outlets are required.) 4 way (4 + 12), Double door	7.00	Each	0.00
22	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note: Vertical type MCB TPDB is normally used where 3 phase outlets are required.)8 way (4 + 24), Double door		Each	0.00
23	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	200.00	Each	0.00
24	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps	25.00	Each	0.00
25	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB),having a sensitivity current 30 mA in the existing MCB DBcomplete with connections, testing and commissioning etc. as required. 63 amps	175.00	Each	0.00

26	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 30 milliamperes in the existing MCB DB complete with	25.00	Each	0.00
27	connections, testing and commissioning etc. as required. 40 amps  Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	504.00	Each	0.00
28	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	20.00	Each	0.00
29	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single pole	4216.00	Each	0.00
30	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	172.00	Each	0.00
31	Supplying and fixing 63 A, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.	175.00	Each	0.00
32	Supplying and fixing 63 A, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.	175.00	Each	0.00
33	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/coke and salt as required.	137.00	Set	0.00
34	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	1728.00	Metre	0.00
35	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	3085.00	Metre	0.00
36	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run) Lightening protection	2555.00	Metre	0.00
37	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For vertical run) Lightening protection	1050.00	Metre	0.00
38	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	35.00	Nos.	0.00
39	Providing and laying G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required.	4550.00	Nos.	0.00
40	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	42.00	Metre	0.00
41	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. (150 mm width X 50 mm depth X 1.6 mm thickness)	100.00	Metre	0.00
42	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. (300 mm width X 50 mm depth X 1.6 mm thickness)	105.00	Metre	0.00
43	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.(450 mm width X 50 mm depth X 1.6 mm thickness)	105.00	Metre	0.00
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44	Supplying, installing on wall, testing and commissioning of following capacity Air Insulated Compact Type Rising Mains for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply with enclosure having IP-54 rating after fixing the tap off boxes and all accessories, made of 1.6mm thick steel sheet duly powder coated in convenient sections complete with 4 Nos aluminium bus bars having current density of 130 A/ sq cm at nominal current rating, necessary joints & expansion joints, fire barrier at each floor, provision of tapping at every metre, continuous earthing with 2 Nos aluminium strip of suitable size (one on each side) including, G.I. clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system etc. as required. 315A Isc = 25 kA for 1 second	156.80	Metre	0.00
45	Supplying, installation, testing & commissioning of following capacity End Feed Unit for the existing Air Insulated Compact Type bus trunking/ rising mains for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply made with 1.6mm thick steel sheet enclosure (IP54) duly powder coated with provision of MCCB/ACB (but without MCCB/ACB) complete with necessary joints including clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system etc. as required. 315 A 25kA SC for 1 sec	14.00	Each	0.00
46	Supplying, installing, testing and commissioning of following capacity TPN tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with TPN disconnector FSU and HRC fuses, connections, earthing etc. as required.4 pole plug in box 100Amp with MCCB 35/50 KA	42.00	Each	0.00
47	Providing and fixing earth bus of 50 mm X 5 mm copper strip on surface for connections etc. as required.	80.00	meter	0.00
48	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/coke and salt as required.	10.00	Set	0.00
49	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	500.00	Metre	0.00
50	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm	5500.00	Metre	0.00
51	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 95 sq. mm and upto 185 sq. mm	4600.00	Metre	0.00
52	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 185 sq. mm and upto 400 sq. mm	600.00	Metre	0.00
53	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Upto 35 sq. mm	200.00	Metre	0.00
54	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Above 95 sq. mm and upto 185 sq. mm	200.00	Metre	0.00

55	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Above 185 sq. mm and upto 400 sq. mm	200.00	Metre	0.00
56	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing masonry open duct as required. Above 95 sq. mm and upto 185 sq. mm	100.00	Metre	0.00
57	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing masonry open duct as required. Above 185 sq. mm and upto 400 sq. mm	200.00	Metre	0.00
58	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. Upto 35 sq. mm (clamped with 1mm thick saddle)	200.00	Metre	0.00
59	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	200.00	Metre	0.00
60	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	200.00	Metre	0.00
61	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	100.00	Each	0.00
62	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 120 sq. mm and upto 400 sq. mm	6000.00	Metre	0.00
63	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 3½ X 185 sq. mm (57mm)	30.00	Each	0.00
64	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 4 X 16 sq. mm (28mm)	30.00	Each	0.00
65	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 4 X 25 sq. mm (28mm)	30.00	Each	0.00
66	supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 KV grade as required :120 sq. mm	6.00	Each	0.00
67	supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 KV grade as required :240 sq. mm	12.00	Each	0.00

68	Supplying, installation, testing & commissioning of Fire control and indicating panel made out of 16 SWG MS sheet to accommodate the following items duly powder coated in approved colour with louvers for ventilation, locking arrangement, audio and visual indication for fire alarm and public address system, monitoring system including connections, interconnections etc complete as required. (i) 250 Watt amplifier racks suitable for operation on 230V AC/24V DC supply conforming to IEC-268-3 complete with all accessories as required - 2 Nos.(one to act as standby) (iii)Talk back master station with LED PTT (press to talk) push button for operation on 230V AC/24 V DC supply conforming to IEC-268 for simplex mode of operation/communication suitable for 10 Nos.talk back unit -1 set. v)Annoucement control desk suitable for selection of different zones selectively and ON ALL CALL switch with visual indication etc. complete as required -1 set. vi)Amplifier change over switch for inter changing amplifier -1 No. Monitor panel for loudspeaker complete with output selector, ON/OFF switch, fuse, visual indications etc. complete as required -1 No. (v)Gooseneck microphone with stand and ON/OFF switch-1 No. Main ON/OFF switch, fuse indication lamps, DC and AC voltmeters & ammeters, terminal blocks etc. complete as required -1 set. (vi) Battery charger trickle cum boost to take complete load of fire alarm & PA system complete with all accessories including providing & fixing of 2 nos.12 volt, 60 AH each sealed maintenance free batteries -1 set ( 10 zone panel)	7.00		0.00
69	Supplying, installation, testing & commissioning sector panel suitable for following zones, complete with visual indications for short circuit fault, open circuit fault, fire condition and all other standard facilities as per IS:2189 with mimic diagram for all area/zone covered, complete with all connections, interconnections as required. reset, acknowledge and silence switches complete as required. (10 zone panel)	1.00	Each	0.00
70	Supplying, installation, testing & commissioning of manual call boxes of MS construction in surface/recess with stainless steel chain & hammer assembly complete with glass and push button etc. as required.	49.00	Each	0.00
71	Supplying, installation, testing & commissioning fire alarm sounder with facility to make announcement, mounted in M.S. box (16 SWG) with hinged cover plate & suitable for operation with amplifier i/c line matching transformer etc. complete as required.	49.00	Each	0.00
72	Supplying, installation, testing & commissioning of 1.5/3/6W metal box ceiling/wall speakers complete as required.	49.00	Each	0.00
73	Supplying & laying of 2x1.5 sqmm fire survival armoured cable, 600/1000V rated with annealed copper conductor having glass mica fire barrier tape covered by an extruded layer of Cross Linkable Ethylene Propylene Rubber (EPR) insulation and LSZH inner bedding, steel wire armouring & LSZH outer sheath complete as required.	5635.00	Metre	0.00
74	Supplying and drawing of cable Fire Retardant PVC insulated copper conductor cable in the existing surface / recessed steel conduit of following pairs, cores and size including connections and interconnections etc. as required.speaker cable Two pair, 2-core, 1.5 sqmm	1960.00	Metre	0.00
75	Supplying and fixing 25 mm dia MS flexible pipe with PVC coating along with all ancillaries and accessories like coupler etc. as required.	700.00	Metre	0.00
76	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 25 mm	7595.00	Metre	0.00

77	Supply,Installation,Testing and Commissioning of ongrid SolarPhotovoltaic Power Plant conforming to MNRE specifications as amended,consisting of Mono/PolyCrystallinesilicon solar cells, netmeteringfacility, necessary protections, earthing,mounted on Aluminium/GI structure of suitable strength with following components complete as required: a) Solar Photo voltaic Module of capacity 330Wp or above,manufactured in India,conforming to IS14286/IEC61215,IS/IEC61730-Part-1, IS/IEC61730-Part-2. SolarPhotovoltaic Module conversion efficiency shall not be less than 16.5%. PVmodules used in solar power plants/systems must be warranted for their output peak watt capacity,which shouldnotbelessthan90% at the end of 10years and 80% at the end of 25 years.b)Power Conditioning Unit(PCU) of 350-800V DC Input voltage range and 400VAC, threephase, 4wire,50Hz+/-2.5Hz, output voltage suitable to generate AC Power with efficiency not less than 97%, total harmonic distortionless than 3% and suitable for ambient temperature from 0to50 degree C.The PCU shall adjust the voltage and frequency level to suit the Grid Voltage Frequency.c) Data Monitoring System complete with accessories.d)FixingofArrayjunction box& Mainjunction box withIP65protectionand termination arrangement for incomingand outgoing cable along with glands,lugs and other accessories etc. as required. e) Lightning and surge voltage protection. f) Connections & Interconnections by supplying & fixing requiredsizeXLPE insulated copper conductor 1.1kV grade armoured power and controlcables between solarmodules, main power cable to gridsupply PCUunitalongwith supplying & fixing of necessarychannel/conduit lugs and other accessoriesetc.as required.	465.00	kwp		0.00
78	SITC of Linear36w LED luminaire delivering an initial system lumen of 3600 lumens & the luminaire shall be with system efficacy $\geq 100$ lm / W. The luminaire Housing shall be made of Extruded Aluminium & the diffuser shall be of polycarbonate/PMMA. The operating CCT shall be 5700K/6500K with CRI of $\geq 80$ . The luminaire shall be with BIS Registered electronic driver with input voltage range of 150 to 270V , THD $\leq 20\%$ & PF $\geq 0.9$ , 50,000 Hrs LED Life with L70 Criteria, IP20. The LED Driver shall be easily avaiable in India for repair and service. The LED shall be SMD type. Luminaire shall have minimum surge protection of 3KV.The luminaire shall be with following certifications: LM79 & LM80 issued by LED manufacture along with Photo Biological Safety Standard.	1861.00	Each		0.00
79	SITC of 10 W WH LED Mirror Light as / Specification, Polycarbonate housing, system wattage -10 w,Lumen pack -1000w with eficacy - 100lm/w,CRI-80. , IP -20 with IS 10322 (part 5/Sec.1)-2012.	504.00			0.00
80	SITC OF 6 W SURFACE MOUNTED LED DOWNLIGHER as/Specification, Aluminium housing, system watage -7 w, Lumen pack -1200 with eficacy - 100lm/w, CRI-80. surge protection - 2kv, IP -20 with IS 10322 (part 5/Sec.1)-2012, (Toilets)	337.00	Each		0.00
81	SITC OF 12 W SURFACE MOUNTED LED DOWNLIGHER as/Specification, Aluminium housing, system watage -12 w, Lumen pack -1200 with eficacy - 100lm/w, CRI-80. surge protection - 2kv, IP -20 with IS 10322 (part 5/Sec.1)-2012, (Balcony / Corridors / Passage)	1680.00	Each		0.00
82	Supply Installation Testing and Comissioning of Wall Bracket Light complete in all respect with E27 Bulb upto 12W	1680.00	Each		0.00
83	Supply, installation, testing & commissioning of Bulk Head Luminare delivering an initial system lumen of 1000 lumens & the luminaire shall be with system efficacy $\geq$ 100 lm / W. Housing: Die Cast Aluminium. IP65 , Diffuser : OPAL Polycarbonate. The operating CCT shall be 5700K with CRI of $\geq$ 80. The luminaire shall be with BIS Registered electronic driver with input voltage range of 150 to 270V , THD $\leq$ 10% & PF $\geq$ 0.95, 50,000 Hrs LED Life with L70 Criteria. The LED Driver shall be easily avaiable in India for repair and service. The LED shall be SMD type. Luminaire shall have minimum surge protection of 2.5KV.The luminaire shall be with following certifications: LM79 & LM80 issued by LED manufacture along with Photo Biological Safety Standard.	112.00	Each		0.00

84	Supply, installation, testing & commissioning of ceiling fan 1400 mm sweep BLDC with remote energy efficient ( Five star rating)220 volts PF 0.85including hanging and connecting up including flexible copper wire for connections from ceiling rose or connector to fan including blades, condensers, down rod, regulator (electronic) etc. complete	1019.00	Each	0.00
85	Supply, installation, testing & commissioning of exhaust fan 300 mm dia ,6 poles , Air Delivery 1290 cum/hr , rated speed 1350 rpm ,220 Volts PF 0.85 double ball bearing complete with blades, metal louvers etc.	357.00	Each	0.00
86	Supply and fixing geysers, energy efficient (Five star rating)single phase, 230V, storage vertical type 15 litres capacity with stainless steel tank, double insulated with outer cover of fibre glass (plastic) rated at 240 V single phase AC including necessary fittings and fixtures such as non-return valves, nipples, etc. complete including fixing with clamps, brackets, screws etc. and also connecting up for work in portions of building complete	336.00	Each	0.00
87	Supply, installation, testing & commissioning of Electrical Kitchen chimney width 90 cms suction 1000m3 /hr , 3 layer baffle fillter , LED 2X1.5 Watt lights , Fan copperwound motor 3 speed with overload protection , feather touch push button, soft stainlesssteel body with SS hood and accessries complete all as specified	168.00	Each	0.00
88	Supply, installation, testing & commissioning of Aluminium Conductor of XLPE insulated PVC sheathed Armoured UG Cables graded 1.1 KV for working Voltage upto 1100 Volts of Following Sizes including the end Termination as required. 3.5CX25 SQMM (For Lift)	560.00	RM	0.00
89	Design, manufacture, supplying, installing, testing & commissioning of Meter Board-1 in correct aligned position, making proper connections, testing and commissioning of following LV panels suitable for 415 V, 3 phase, 4 wire, 50 Hz power distribution system. The panel shall be Indoor IP52 rating, free standing, floor/wall mounting, sheet metal clad, cubicle,dust and vermin proof type compartmentalized design fabricated out of 14 SWG(2 mm thick) CRCA sheet steel, complete with aluminium bus bars, separate earth bus bar to be provided through out the length of the panel. The incoming and outgoing feeders shall be accommodated in a modular multitier arrangement and shall be interlocked to avoid paralleling, adequate size cable alley, painting, earthing, numbering, danger plate etc as required as per specifications and drawings. meter board shall be got approved by Engineer Incharge. Meter Board Incoming :Incomer: 100 A TPN MCCB Metering & Indication :One (1) No. digital ammeter 96 sq.mm with selector switch 0-100 A One (1) No. digital voltmeter 0-500 V with selection switchOne (1) set of RYB phase indication lamps with 2 A backup MCB. Busbar :100 A TPN AL Bus Bar Outgoings :Outgoings: 4 No. 63 A TPN MCB Digital Electronic KWH Meter (a.)Tamper proof three phase 4 wire 415 V AC energy meter of, of capacity 10-40 Amps - 4 No as per IS Standards 4 nos. meter compartments for Three phase meter shall be provided with the acrylic sheet window complete with locking arrangement but without locks complete as required. Meter Board complete as above and as required.	42.00	Each	0.00

90	Design, manufacture, Supply, installation, testing & commissioning of Emergency panel in correct aligned position, making proper connections, testing and commissioning of following LV panels suitable for 415 V, 3 phase, 4 wire, 50 Hz power distribution system. The panel shall be Indoor IP52 rating, free standing, floor/wall mounting, sheet metal clad, cubicle, dust and vermin proof type compartmentalized design fabricated out of 14 SWG(2 mm thick) CRCA sheet steel, complete with aluminium bus bars, separate earth bus bar to be provided through out the length of the panel. The incoming and outgoing feeders shall be accommodated in a modular multitier arrangement and shall be interlocked to avoid paralleling, adequate size cable alley, painting, earthing, numbering, danger plate etc as required as per specifications and drawings. meter board shall be got approved by Engineer- in charge.Incoming 02No. 160 A, TPN, 35 kA, MCCB having Thermal Magnetic Trip Unit with protection against Overload & Short Circuit, 0-100 A Digital Ammeter with inbuilt ASS, 3 Nos. CT 100/5A, class 1.0 for metering and LED Indication Lamp for ON, OFF & TRIP. Bus Bars Electrolytic high conductivity 3P, 4W aluminium conductor bus-bars rated 200 Amps, suitable to withstand symetrical fault level of 35 KA for 1 second at 415 volts and with necessary heat shrinkable sleeving. Outgoings: 2 Nos. 40 A TPN MCCB 15 KA, 3 Nos.63 A TPN MCCB 15 KA, 1 Nos. 100 A TPN MCCB 15 KA, Emergeny Panel complete as above and as required.	7.00	Each		0.00
91	Providing & fixing of 19 mm thick Rubber Mat ISI marks for electrical panel safety purpose.	14.00	sqm		0.00
92	Design, manufacturing, supplying, installation, testing & commissioning of 8 passenger (544 kg) lift having contract speed of 1MPS used for G+6 storied resdential complex with the following technical specifications:(i) Speed: 1MPS (ii) Floors: G+6 (iii) Travel: 25 Meters (Approx.) (iv)Stops & Openings: 7 stops & 7 openings (All openings on same side) (v) Power supply: 415V, 3 phase, 50Hz, 4 wire system (vi)Controller: AC, variable voltage, variable frequency with closed loop.(vii) Operation: Microprocessor based simplex selective collective(With/without attendent) (viii) Machine: Geared type (ix) Car Size: 1300 WideX1100 Deep (Inside dimensions) (x)Landing Doors: Stainless steel scratch proof(moon rock finish) (xi) Car Entrance: Protected by centere opening horizontal sliding stainless steel door scratch proof (moon rock finish) clear opening about 800mm wide X 2000mm height.(xii) Car Panels: Stainless steel (moon rock finish) (xiii) Handrails: on 3 sides: Stainless Steel Mirror finish(xiv) False Ceiling: Stain less steel with hair line finish.(xv) Flooring: Vinyl Tiles.Signals: (Salient details are below)(i) Details: Combined luminous hall position indicator, Integral full height car opening panel with luminous buttons, Digital car position indicator combined with direction arrows. Overload warning indicator. Battery operated alarm bell and emergency light. Fireman's switch at main lobby.(ii) Face plate finish and shape. Stainless steel in hairline finish, Rectangular. (iii) Visual Indications: Indicators for car and landing shall be with direction and position. LED light fixture shall be provided inside the car for illumination along with a ventilation fan with automatic operation. Lift announcement system should be provided in the car as also a hands free press & speak intercom. The lift should have an automatic rescue device with dry maintenance free batteries to operate in no power situation.	14.00	Nos.		0.00
93	Supply, Installation, Testing and Commissioning of 11 kV VCB, 11 kV Switchgear Panel comprising of 8 nos. of indoor type VCB panels, suitable for solidly grounded system, fully factory built and assembled for direct installation. The panels should be designed, manufactured and tested in accordance with relevant IS / IEC with latest amendment. The Panels shall be as per specifications of HT Panel mentioned in the tender under electrical work specifications.	1.00	set		0.00

94	Supply, Installation, testing and commissioning of Cast Resin Dry Type, 1000 KVA, 11/0.415 KV, 3 Phase, 50Hz, Dynll, indoor type, copper wound transformer with OFF load tap changing arrangement on HV side ± 5% in steps of 2.5%, having cable end boxes on HV side suitable for 3xlCx240 Sqmm XLPE, copper cable of 11KV grade on HT side and 6x4Cx 240sqmm XLPE, 1.1KV, Cu cable on LV side complete with all accessories. Neutral of transformer shall be earthed with 2 nos. earth electrodes and body shall be earthed with minimum 2 nos. Earth electrode. Transformer shall be mounted on suitable size of channel which is to be fixed by grouting 4nos. of bolts. The winding material should be of high conductivity electrolytic grade copper. The insulation should be Cast Resin type; Class-F. Conductor should have thermally upgraded paper insulation reinforced with fibre glass. The coil assembly is to be impregnated & cast under vacuum with epoxy resin for achieving non-hygroscopic, acid & alkali resistant insulation. The complete winding should have smooth cylindrical finish after impregnation to ensure high mechanical strength. The thickness of resin should be uniform. The insulation should be self- extinguishing type. Winding temperature scanner connected with three nos. RTDs, one for each LV winding should be provided in a metallic enclosure that is mounted on the main enclosure. The scanner should provide indication, alarm & trip contacts. Winding temperature indicator should show maximum temperature attained. The RTDs should be properly wired up to the scanner terminals. Suitable hole with gland is required for control cable connecting scanner alarm/ trip contacts to HT Breaker.	2.00	Set	0.00
95	Supply Installation,testing and commissioning of 180 KVA, 415V, 50Hz, DG Set along with AMF Panel complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled complete in all respect. The DG Set shall be as per technical specifications of DG set given in the tender. The cost of AMF Panel is included in this item.	2.00	Nos	0.00
96	Supply, installation, testing and commissioning of XLPE/PVC insulated & PVC sheathed copper unarmoured control cables of 1.1 KV grade with copper conductor as per IS 7098 Part-I -1988 etc complete.including making terminations of control cable terminations for control cables as per item 7.6 above complete with single brass compression glands, copper lugs etc. as required: 4 C x 2.5 sq.mm control cable	50.00	Metre	0.00
97	Supply, installation, testing and commissioning of XLPE/PVC insulated & PVC sheathed copper unarmoured control cables of 1.1 KV grade with copper conductor as per IS 7098 Part-I -1988 etc complete.including making terminations of control cable terminations for control cables as per item 7.6 above complete with single brass compression glands, copper lugs etc. as required: 12 C x 2.5 sq.mm control cable	120.00	Metre	0.00
98	Supply of XLPE insulated IS:7098/II/85 H.T.cable for working voltage 11 K.V.Earthed with Stranded Compacted Circular Aluminium Conductor Screened with Extruded Semiconducting compound, AI,XLPE Insulated Screened with extruded semi-conducting compound in combination with Copper Tape, cores laid up, inner sheath of Thermoplastic tape, galvanised flat steel strip armoured and overall Extruded PVC Type ST- 2 Outer Sheathed cable etc complete 3 C x 240 Sq.mm XLPE HT cable (Earthed)	3000.00	Metre	0.00
99	Supply of XLPE insulated IS:7098/II/85 H.T.cable for working voltage 11 K.V.Earthed with Stranded Compacted Circular Aluminium Conductor Screened with Extruded Semiconducting compound, AI,XLPE Insulated Screened with extruded semi-conducting compound in combination with Copper Tape, cores laid up, inner sheath of Thermoplastic tape, galvanised flat steel strip armoured and overall Extruded PVC Type ST- 2 Outer Sheathed cable etc complete 3C x 120 Sq.mm XLPE HT cable (Earthed)	1500.00	Metre	0.00
100	Supply of 1.1 KV Aluminium Conductor, FRLS, XLPE Insulated, Steel Strip Armoured, Inner and outer sheated cables as per IS 7098 (Part-1) of following sizes 4C x 240 sq mm Aluminium	600.00	Metre	0.00
101	Supply of 1.1 KV Aluminium Conductor, FRLS, XLPE Insulated, Steel Strip Armoured, Inner and outer sheated cables as per IS 7098 (Part-1) of following sizes $3C \times 120 \text{ sq mm}$ Aluminium	100.00	Metre	0.00

102	Supply of 1.1 KV Aluminium Conductor,FRLS,XLPE Insulated, Steel Strip Armoured, Inner and outer sheated cables as per IS 7098 (Part-1) of following sizes 3 ½ C - 185 sq mm Aluminium	3000.00	Metre	0.00	
103	Supply of 1.1 KV Aluminium Conductor, FRLS, XLPE Insulated, Steel Strip Armoured, Inner and outer sheated cables as per IS 7098 (Part-1) of following sizes 3 ½-25 sq mm Aluminium	4000.00	Metre	0.00	
104	Supply of 1.1 KV Aluminium Conductor, FRLS, XLPE Insulated, Steel Strip Armoured, Inner and outer sheated cables as per IS 7098 (Part-1) of following sizes 4-16 sq mm Aluminium	1500.00	Metre	0.00	
105	Supply of 1.1 KV Aluminium Conductor, FRLS, XLPE Insulated, Steel Strip Armoured, Inner and outer sheated cables	1500.00	Metre	0.00	
106	as per IS 7098 (Part-1) of following sizes 4- 10 sq mm Aluminium  Supply, Installation, Testing and Commissioning of Main LT Panel -1. The panels should be designed, manufactured and tested in accordance with relevant IS / IEC with latest amendment. The Panels shall be as per specifications of Main LT Panel -1 mentioned in the tender under electrical work specifications.	1.00	Each	0.00	
107	Supply, Installation, Testing and Commissioning of EMERGENCY PANEL-1. The panels should be designed, manufactured and tested in accordance with relevant IS / IEC with latest amendment. The Panels shall be as per specifications of EMERGENCY PANEL-1 mentioned in the tender under electrical work specifications.	2.00	Each	0.00	
108	Providing and fixing 50 mm X 5 mm G.I. strip in 100 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	100.00	Metre	0.00	
109	Supply, installation, testing & commissioning of 9 m GI octagonal pole with base plate 260x260x16 mm, top-70mm & bottom-155mm. Made of 3 mm thick suitable for maximum wind speed upto 160 km/h.including foundation bolts, & bracket arm1.2 mtr. Long andcivil foundation complete in all respect.	80.00	each	0.00	
110	SITC of four core aluminium conductor XLPE insulated 1.1 KV armoured cable 4 core 10 Sq.mm.	2400.00	RM	0.00	
111	SITC of 3 x 2.5 sq.mm PVC insulated Copper conductor single core wire in the existing steel pole and making connections as required.	960.00	RM	0.00	
112	Supply, installation, testing & commissioning of LED 60 W street light fitting with LED 60 Watt Bulb Complete Philips or equivalent complete including fixing clamp and pipe / nipple suitable for mounting on 40 or 50 mm dia GI mast or bracket arms with pole fixing attachments and fixing the lamp.	80.00	Each	0.00	
	Design, fabrication, supply, installation, testing and commissioning of, 415 V, 3 phase, 50 Hz. street light Panel dust, vermin and weather proof outdoor type IP54 rating, 2.0 mm thick CRCA sheet enclosure and hinged and lockable door with components as below complete as required of following rating. The Panel shall be complete with all interconnections, internal wiring with copper wire of suitable size, labels & accessories for automatic switch ON/OFF of street lighting etc complete in all respect & suitable for mountings :Incoming-63 Amp TPN MCCB with Rotating handle, thermo-magnetic O/C, SC & E/F release 16 KA breaking capacity 100 Amps Al Bus bar Outgoing - 32 Amp TPN MCB 10 KA - 8 Nos. 8 Nos. 32A TPN contactor. Timer switch -01 for automatic light on/off operation.	1.00	each	0.00	
114	Supply, Installation, testing and commissioning of 50 pairs MDF Box, Mounting Frame with Krone Module of telephone outdoor type Feeder Pillar with relevant IP and totally enclosed compartmentalized, fabricated with 2 mm thick sheet, complete with KRONE make telephone tag block, incoming & out goings, cable terminations, interconnections, pedestal frame on RCC foundation/platform of 300 mm height above GL, necessary earth connections conforming to relevant IS codes, specification and drawings.	7.00	Each	0.00	

Supply, Installation, testing and commissioning of 100 pairs MDF Box, Mounting Frame with Krone Module of telephone outdoor type Feeder Pillar with relevant IP and totally enclosed compartmentalized, fabricated with 2 mm thick sheet, complete with KRONE make telephone tag block, incoming & out goings, cable	
terminations, interconnections, pedestal frame on RCC foundation/platform of 300 mm height above GL, necessary earth connections conforming to relevant IS codes, specification and drawings.	0.00
Supply, Installation, testing and commissioning of 1000 pairs MDF Box, Mounting Frame with Krone Module of telephone outdoor type Feeder Pillar with relevant IP and totally enclosed compartmentalized, fabricated with 2 mm thick sheet, complete with KRONE make telephone tag block, incoming & out goings, cable terminations, interconnections, pedestal frame on RCC foundation/platform of 300 mm height above GL, necessary earth connections conforming to relevant IS codes, specification and drawings.	0.00
Supply, Installation, Testing and commissioning of 50 Pair JFC Riser cable multi core 0.61 mm annealed tinned copper conductor PVC insulated and PVC sheathed and jelly filled and overall PVC sheathed armoured telephone cables generally conforming to ITD S/WS-11-C and IS 1554 Part as per specification complete as required	0.00
Supply, Installation, Testing and commissioning of Jumper Wire (1 Roll in 90 Mtrs.) as per specification complete as required	0.00
Supply, Installation, Testing and commissioning of IP based EPABX System expandable upto 1000 ports (IP, Analog, Digital) with below present requirement:  10 IP extension ports lic, 200 analog trunk ports, 02 ISDN PRI (30 channels), 01 PC based operator console (with PC, IP Phone and Headset), 200 Analog ports having all standard call related features. Analog and PRI card should be distributed in two gateway for redundency. The server of IP EPABX should be having Intel Skylake CPU S-4114 or better with 64 bit Linux Operating System from IP PABX OEM. IP EPABX Server should support Link Level Redundancy (Fully Duplex) with minimum Dual Gigabit interfaces, 48 GB RDIMMs, HDD RAID-1/6 reliability and Redundant Power Supplies. IP-PBX system along with IP PBX Server, IP PBX Gateway IP Phone, Headset should be of same OEM Supplied. The system should support for voice encoding the following standards:- (i) G.711 (ii) G.722 WIDE BAND AUDIO .  Approved Makes: Avaya/Cisco /Polycom/Toshiba/ Ericsson	0.00
Supply Installation and Commissioning of IP Based centralized Operator Console with all dignostic Software of IP  2.00 Each  EPABX System	0.00
121 Supply Installation, Testing and Commissioning of Analog Speaker Phone with backlight. 504.00 Each	0.00
Supply, Installation, Testing & Commissioning of 42U Rack as per the given Specification etc. all complete.  1.00 Each	0.00
Supplying, laying and fixing of 6 core Corrugated Steel Tape Singlemode Optical Fiber of size LSZH Outdoor Universal loose tube Black Jacket through existing GI/HDPE/ Hume pipe or on cable trays inside the cable duct including all necessary fixing accessories e.g. cable ties, hardware etc. Standard & Approval: EN 50173-1: 2002, IEC 60794-1, ISO 11801 2nd ED (Make: Legrand / Panduit - Pannet/Siemon).	0.00
Supplying, installing, testing and commissioning of 6 port LCS2 Adapter plate, loaded with 3 nos. of duplex LC unit for 6 Single mode fibers of size Adapters to be compatible to fit in 19" U/UTP 24 port modular patch panel or 24 port LIU. (Make: Legrand / Panduit - Pannet/Siemon).	0.00
Supplying, installing, testing and commissioning of LIU 24 port LC type LCS2. Rack Mount 19" modular type unloaded to be compatible for 4nos of 6 X RJ 45 UTP unit in a block or 6 port SC/LC/ST adapter unit. Material of LIU is Galvanised Steel and Weight is approx 2.605 kg. (Make: Legrand /Panduit - Pannet/Siemon)	0.00
Supplying, installing, testing and commissioning of SM Fiber Pigtail -LC/LC Duplex Cords - 2 mtrs. (Make: Legrand 96.00 Nos. //Panduit - Pannet/Siemon).	0.00

127	Supplying, installing, testing and commissioning of SM Patch Cord -LC/LC Duplex Cords - 2 mtrs. (Make: Legrand	18.00	Nos.		0.00
127	/Panduit - Pannet/Siemon).				0.00
128	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed steel/ PVC conduit as required. 4 Pair CAT6 Unshielded, Twisted Pair (U/UTP) Cable 305 mtr per Box. Blue in colour conforming to the following standards like ANSI/TIA 568 C.2, EN50173, IEC 11801 2nd ED, 700Mhz etc. in Cat 6 U/UTP LCS2 cable with 23AWG. (Make: Legrand / Panduit - Pannet/Siemon).	915.00	Mtrs.		0.00
129	Supplying and drawing of Armoured UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed steel/ PVC conduit as required. 4 Pair CAT6 Unshielded, Twisted Pair (U/UTP) Cable 305 mtr per Box. Blue in colour conforming to the following standards like ANSI/TIA 568 C.2, EN50173, IEC 11801 2nd ED, 700Mhz etc. in Cat 6 U/UTP LCS2 cable with 23AWG. (Make: Legrand / Panduit - Pannet/Siemon).	2100.00	Mtrs.		0.00
130	Supplying, installing, testing and commissioning of Cat 6, Tool less Information outlet for Voice Cat6 U/UTP built in crimping hands-free, minimum 5 times reconnection possibilities. LCS2 Toolless RJ45 Information outlet where insertion test (in & out) must be 2500 times (I/O) along with front side Label holded and transparent shutter for projection Arteor category white in colour, including front plate and anodised GI box in concealed manner of adequate sizes,including all fixing accessories.(Make: Legrand / Panduit - Pannet/Siemon).	22.00	Nos.		0.00
131	Supplying, installing, testing and commissioning of following length of Cat - 6 patch cord. 4 Feet: CAT6 UTP 23 AWG Patch Cord - 1 mtr - Rack End. Factory crimped LCS2 Patch cord in Blue colour. (Make: Legrand / Panduit - Pannet/Siemon).	22.00	Nos.		0.00
132	Supplying, installing, testing and commissioning of following length of Cat - 6 patch cord. 7 Feet: CAT6 UTP 23 AWG Patch Cord - 2 mtr - User End.Factory crimped LCS2 Patch cord in Blue colour. (Make: Legrand / Panduit - Pannet/Siemon).	22.00	Nos.		0.00
133	Supplying, installing, testing and commissioning of 24 port Cat 6 patch panels available with block of four equipped with tool less IO, Rack Mountable. 19" Modular Patch Panel, loaded CAT6 U/UTP 24 port LCS2 rack mountable to be compatible in 4nos of 6 X RJ 45 Tool less connector U/UTP unit in a block.(Make: Legrand / Panduit - Pannet/Siemon).	2.00	Nos.		0.00
134	Supplying and fixing following cover plate on existing modular metal boxes etc. as required.  1 or 2 Module Face Plate (Make: Legrand / Panduit - Pannet/Siemon).	22.00	Nos.		0.00
135	Supply, Installation, Testing & Commissioning of Switch with at least 24 X 10/100/1000BASE-T POE+ Ports and 2 x 10G Base-T and 4 X SFP+ Ports, Switching capacity should be 168 Gbps, Switch should support 16 L3 IP interfaces, ACL, QOS, VRRPv3, Equal-Cost Multi-Path (ECMP), UDP helper, Policy-based Route (PBR), 802.1x, Embedded 6 kV surge protection on ethernet ports, Switch should have console port, RJ45 Management Port and USB port, Should support internal/external redudent power supply for 1+1 redundancy and load sharing. Certification: CE, FCC, BSMI, CB and UL. OEM should available in Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure Report from latest last three consecutive year.(Make: Cisco/D-Link/Erricson).	9.00	Nos.		0.00
	Supplying Installation testing and Commissioning of 10GBASE-LR SFP+ Transceiver, Fiber Module should be Hot Pluggable, MSA Compliant and RoHS Compliant, Module should support 10KM Distance, Fiber module should be same of Switch OEM,(Make: Cisco /D-Link / Erricson).	18.00	Nos.		0.00
137	Supplying, installing, testing and commissioning of 15U Wall-mounting cabinets. size 771.35X600X500mm (HXWXD)) with all standard accessories. Width (mm) 600, Depth (mm) - 500, Approx.Net Wt (kg) - 32, CRCA 'D' Grade thickness (mm) - 1.2, RAL 9017 (Matt Black), Glass - 4mm Toughened Tinted Glass Door, Accessories:, Cooling Fan (230V A/C 90 CFM) - 2 Nos, PDU 230VAC - 1 No, Cable Manager Metal - 3 Nos, Earthling Strips 150mm H - 1 No, Mounting Hardware (20 sets of M6 screws,washer,cage nuts (nickel coated)) - 1 No, Wall Screws (4 sets of 2" screws, washer,rubber grommet (nickel coated)) - 1 No, Door Lock - 1 No, Front Metal Band -1 No. In the rack there must be maintained1 U = 1.75 inches space. Nos. 20 .(Make: Valrack /Asian / APW).	8.00	Nos.		0.00

138	Supply, Installation, Testing & Commissioning of 4MP IR IP H.265 Vandal Proof Dome camera with 2.8 to 12mm Motorized Lens, Smart IR, up to 30M IR distance, Up to 80 dB WDR (Wide Dynamic Range), 3D DNR (Digital Noise Reduction), H.265+, H.265, H.264, MJPEG, Corridor mode, Triple streams, 3-Axis, IP67, IK10 Vandal Resistant, Colour: 0.005Lux (F1.4, AGC ON), 0 Lux with IR, Video Compression H.265+, H.265, H.264, MJPEG, Behavior Detection Intrusion, Crossing line, Motion detection, Object left, Missing object, Intelligent Identification Face detection, Defocus, Scene Change, PoE (IEEE802.3 af) Power consumption: Max 7.2W, Edge Storage Micro SD Card, Up to 256GB, ANR Support, Working Environment -40°C ~ +60°C, Humidity ≤ 90% RH(Noncondensing), Compatible Integration ONVIF (Profile S/G), API. (Make: Norden / Pelco / Axis).	7.00	Nos.	0.00
139	Supply, Installation, Testing & Commissioning of 4MP IR IP H.265 Vandal Proof Compact Bullet camera with 2.8mm (Optional 4mm) Fixed Lens, POE, SD card slot, Smart Analytics, Mic and 15M IR support,PoE (IEEE802.3 af) Power consumption: Max 7.2W,Edge Storage Micro SD Card, Up to 256GB, ANR Support,Working Environment - $40^{\circ}$ C $\sim +60^{\circ}$ C, Humidity $\leq 90\%$ RH(Non-condensing),Compatible Integration ONVIF (Profile S/G), API.(Make: Norden / Pelco / Axis).	15.00	Nos.	0.00
140	Supply, Installation, Testing & Commissioning of Video Management Software with built in Video Analytics management and recording solution. The intelligent video management software shall enable management and control of live and recorded video, seamlessly integrating analog and digital video components. This shall be designed for small and medium sized deployments and all-in-one architecture shall be based on one standard Server serving as the recording server, system and client also if required, however separate workstation should be offered for client usage. The system shall be easy to install, configure, maintain and provides all levels of security personnel with intuitive and reliable control. This shall enable fast detection of potential threats and emergency event management. The INVMS shall comply with the following requirements, such as Hexaplex Simultaeous functioning of Live, Recordig, Playback, Video Analytics, Alarms Handling, Configuration. The softwar eshould support Hybrid Video inputs, with high FPS recording, Alarms Configuration and Management, High Resolution camera support upto 12MP as minimum, Multi View split view, dewarping view of camera should be supported for High Resolution, and multisensor/fisheye cameras. Map view, Reports and Logs, Quick View Playback, User Pirviledges should be configurable.	22.00	Nos.	0.00
141	Supply, Installation, Testing and Commissioning of Video Management Server with 180 days storage (recording to be done at 2 MP, 25 FPS). Server shall be sized according to the solution quoted and Raid 5 redundancy shall be maintained for the servers. complete as required.	1.00	Nos.	0.00
142	Supply, Installation, Testing & Commissioning of 6 TB Surveillance Hard disk. Approved Makes:- WD / Segate / Toshiba	12.00	Nos	0.00
143	Supply, Installation, Testing & Commissioning of 49' Flat Screen HD led (24X7) with Interfaces include HDMI, DVI, D-sub, Component and Composite input as well as RS-232C and RJ45 for extensive connectivity, remote control and wall mount unit / floor stand complete with making connections etc complete as reqd.  Approved Make:- LG / Samsung / Panasonic	2.00	Nos	0.00
144	Client workstation Processor intel Zeon 4ghz or higher, OS geniune Window 10/7, Color Monitor 22", RAM 8GB DDR3 SDRAM, MEMORY 1TB HDD, 2GB GRAPHIC CARD complete as required.(Make : HP / DELL / Lenovo).	1.00	Nos.	0.00
	Group C : ELECTRO-MECHANICAL			0.00

1	Supplying, installation, testing and commissioning of electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Terrace Pump) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical confirming to IS: 1520 Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horiziontal foot mounted type with Class-'F' insulation, conforming to IS-325M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc.as required. Suitable cement concrete foundation duly plastered and with anti vibration pads. 900 lpm at 35 m Head	7.00	Set	0.00
2	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 25 mm dia	73.50	М	0.00
3	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 80 mm dia	73.50	М	0.00
4	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 100 mm dia	49.00	М	0.00
5	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 150 mm dia	871.50	М	0.00
6	Supplying and fixing single headed internal hydrant valve with instantaneous Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Gunmetal/Stainless Steel cap and chain as required: Single headed Gunmetal	49.00	Set	0.00
7	Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required: 80 mm dia	49.00	Set	0.00
8	Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required : 100 mm dia	7.00	Set	0.00
9	Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required : 150 mm dia	7.00	Set	0.00
10	Providing, installation, testing and commissioning of non-return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required 100 mm dia	7.00	Set	0.00
11	Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required: Gun metal	98.00	Nos.	0.00
12	Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. 40 m	49.00	Set	0.00

13	Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange.150 mm dia	7.00	Each	0.00
14	Supply, installation, testing and commissioning of Bourden type, stainless steel dial type pressure gauge with isolation valve and pipe having calibration of 0-16 kg/cm2.  MAKES: HGURU / FIEBIG	7.00	Each	0.00
15	Providing & fixing of pressure switch in M.S. pipe line including connection etc. as required.	3.00	Each	0.00
	Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 4 way - 150 mm dia M.S. Pipe	7.00	Set	0.00
17	Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange. 150 mm dia	7.00	Each	0.00
18	Supply and fixing of Co2 type Fire Extinguishers 4.5 Kg capacity confirming to IS 2878 made from ISI marked steam less cylinder confirming to IS:7285 & CE certified and fitted with ISI marked controlled valve confirming to IS:3224, high pressure 1 Mtr discharge hose & horn complete with initial gas charged with carrying handle with wheels and wall mounting bracket. Squeeze lever discharge, used un-used indicator, Aphoxy coated paint (Red) with 93% gloss with 2 years warranty Including transportation, all taxes and all labour charges etc complete.	49.00	Each	0.00
19	Supply and fixing of ABC stored pressure squeeze grip type fire extinguishers, 9 kg capacity, IS:15683: 2006, filled with ABC Mono Ammonium Phosphate base powder- 90 complete with discharge hose and wall mounting bracket, 2mm Mild Steel, EPDM Rubbers, Pressure Guage, which work effectively on all class of fires (A, B, C & Electrical fires) with 5 years warranty Including transportation, all taxes and all labour charges etc complete.	49.00	Each	0.00
20	Providing and fixing fire hose cabinet Front shutters and frame of size 1500x1800 mm, weather proof, fabricated from Aluminum powder coated frame and glazed shutters with hinged double front door, partially glazed with 4 mm thick glass with locking arrangement duly painted "Fire Hose Box" written on front, suitable to house 2x15 metre (two lengths) of canvas hose with couplings, branch pipe, One fireman's axe, first aid fire hose reel and hydrant outlet complete	49.00	Each	0.00
21	Providing & fixing wall mounted Emergency Instruction Plate consisting of instruction sprinted on scrylic sheet.3 mm thick Instructions shall be of at least 50 mm high letters computer screen printed on acrylic sheet.	49.00	sqm	0.00
22	Providing, laying, testing and commissioning of PVC insulated, copper conductor, 1100 V grade, armoured cable 10 Sq.mm x 4 core PVC insulated copper conductor cable armoured + 1 x 6 mm earth wire	105.00	m	0.00
23	Supply installation, testing & commissioning of gas chullah with following fittings & fixtures and making good etc. complete as per the direction of engineer in charge Having 3 unit each of Globe valve 1/4" (8.45mm), line pipe 1/4" black steel,ERW screwed, line pipe 1/2", black steel, ERW screwed, Casing chullah 6" for pipe., Nipple straight sch.80,1/4"x4" long, bushing hex,MI,NPT,size 1/2"x1/4". Tee,Equal,straight, size 1/2". Plug,squr/hex.heads,300 PSI, size 1/2".Ring burner, complete with fittings.	168.00	each	0.00
24	Supply of manpower for operation of electro-mechanical services and other facilities during 1st year of DLP+ additional 2 years.	36.00	month	0.00

	Design, Supplying, installing, testing & commissioning of Sewage Treatment Plant of 150 KLD based on MBBF technology. The Rate is inclusive of All Civil Structure, Electrical & Mechanical Equipmet complete on turnkey basis Nature of effluent - Domestic Sewage from toilet, kitchen, Bathrooms & pantry waste water shall be discharged into the STP. Design to take consideration of same  The STP shall be designed based on the following parameters:  Characteristics of waster water  Flow Rate : 150KLD					
25	pH : 7-9 BOD : upto 500 mg/lt. Oil & Grease : less then 10 mg/lt. COD : upto 800 mg/lt. SS : upto 500 mg/lt. Oil ,Grease : upto 50 mg/lt.	1.00	EACH			0.00
	The treated sewage shall have following characteristics:  pH : 7.0 - 7.5  BOD : less than 30 mg/lt.  COD : less than 100 mg/lt.  TSS : Less than 30 mg/lt.  Sewage treatment plant shall include the supply, installation, testing and commissioning					
						0.00
					Total =	₹ -
	Bidders shall have to fill up the "Total Bid Value" (under RFx Information					
	ilities including statutory liabilities in their quoted price (excluding G					in "Total Bid Value"
liab	ilities including statutory liabilities in their quoted price (excluding G	ST)				
liab	ilities including statutory liabilities in their quoted price (excluding GS)  he bidders should fill up the "Total Bid Value" in figures upto two decimal places only.	ST)				
*** T	ilities including statutory liabilities in their quoted price (excluding GS)  he bidders should fill up the "Total Bid Value" in figures upto two decimal places only.	Quoted	Price:	As	quoted	in "Total Bid Value"
*** T) Note  1.0	ilities including statutory liabilities in their quoted price (excluding GS)  he bidders should fill up the "Total Bid Value" in figures upto two decimal places only.  e:  In addition to filling up the "Total Bid Value", this Price Bidding Format must be uploaded by the state of the state o	Quoted the bidders of	Price:	As	quoted	in "Total Bid Value"
*** T) Note  1.0	the bidders should fill up the "Total Bid Value" in figures upto two decimal places only.  E:  In addition to filling up the "Total Bid Value", this Price Bidding Format must be uploaded by the Price Bidding Format under the "Notes and Attachment" Tab in e-tender portal.	Quoted the bidders of	Price:	As	quoted	in "Total Bid Value"
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