

**NAME OF PROJECT : CONSTRUCTION OF SUPER SPECIALTY HOSPITAL FOR GOVT. RAJAJI HOSPITAL
MADURAI,TAMIL NADU**

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NAME OF PROJECT : CONSTRUCTION OF SUPER SPECIALTY HOSPITAL FOR GOVT. RAJAJI HOSPITAL MADURAI,TAMIL NADU						
CIVIL ABSTRACT						
Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	2	EARTH WORK				
1	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	100 Sqm	20000.00		
2	2.33	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 materials and disposal of unserviceable materials				
2.1	2.33.1	Beyond 30 cm girth upto and including 60 cm girth	each	30.00		
2.2	2.33.2	Beyond 60 cm girth upto and including 120 cm girth	each	20.00		
2.3	2.33.3	Beyond 120 cm girth upto and including 240 cm girth	each	10.00		
3	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	2.6.1	All kinds of soil up to 1.5m depth	Cum	13300.00		
4	2.6+2.26. 1	Do do 1.5m to 3.0m depth do do	Cum	13300.00		
		FILLING IN SUBSTRUCTURE				
5	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc., in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering etc complete, and form uniform level for flooring concrete .	Cum	19800.00		
6	1.1.2 (8)	Conveying from site and disposing off the excess earth as per the direction of engineer in charge.	Cum	6900.00		
		CONCRETE WORK				
7	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All works up to plinth level.				
	4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)				
		Plinth Protection/Flagging Concrete - Allround Building (average depth)	Cum	100.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
8	4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size). (Below Flooring & Below Plint Beam)	Cum	1050.00		
		SUNKEN FILLING				
9	MR	Providing and laying cinder concrete in cement 1:15 (1 cement : 15 cinder of 12.5mm nominal gauge) on terraced roof or sunken slabs, laid to slope compacting, including cost of materials, labour, curing complete as per specifications.	Cum	350.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		REINFORCED CEMENT CONCRETE				
10	5.40	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using fly ash and cement content as per approved design mix and 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.				
		NOTE- 1) Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately. 2) Fly ash conforming to grade I of IS 3812 (Part-1) only be used as part replacement of OPC as per IS 456. Uniform blending with cement to be ensured in accordance with clauses 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC. 3) The above item shall be used judiciously where specified quality of Fly Ash is available for mixing in concrete. Also, the guidelines issued by CDO, CPWD, vide circular no. CDO/SE(RR)/Fly Ash (Main)/102 dated 9th April 2009 shall be followed in such cases.				
10.1	5.40.1	All work up to plinth level. (M25)	Cum	6655.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
10.3	5.40.2	All work above plinth level up to floor V level (M25)	Cum	10570.00		
	5.34	Extra for proving richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.				
	5.34.1	Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).				
10.2	5.40.1 +5.34.1	ii) All work up to plinth level.(M30)	Cum	560.00		
10.4	5.40.2 +5.34.2	ii) All work above plinth level up to floor V level (M30)	Cum	1986.00		
10.5	5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein.				
10.5.1		a) for M25	Quintal	10335.00		
10.5.2		b) for M30	Quintal	1782.00		
		RCC Plastering				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
11	5.23	Smooth finishing of the RCC exposed surface 6mm thick cement mortar 1:3 (1 cement : 3 fine sand)	Sqm	7900.00		
	5	FORM WORK				
12	5.9	Centering and shuttering including strutting, propping etc., and removal of form for,				
12.1	5.9.1	Foundations, Footings, bases of columns,etc for mass concrete.	Sqm	3450.00		
12.2	5.9.2	Walls any thickness including attached pilasters butteresses,Plinth and string courses etc.	Sqm	4050.00		
12.3	5.9.3	Suspended floors,roofs,landings,Balconies and access platform	Sqm	29000.00		
12.4	5.9.5	Lintel,beams,plinth beams,girders,bressumers and cantilevers	Sqm	25150.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
12.5	5.9.6	Columns and Pillars, Piers, Abutments, Posts and Struts.	Sqm	13400.00		
12.6	5.9.7	Stairs(excluding landings) except spiral-staircases.	Sqm	700.00		
12.7	5.9.15	Small lintels not exceeding 1.5m clear span, molding, as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like.	Sqm	100.00		
12.8	5.9.19	Weather shade, chajjas, corbels etc. including edges	Sqm	2650.00		
13	5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentring at all levels, over a height of 3.5m, for every additional height of 1 meter or part thereof (plan area to be measured)				
	5.11.1	Suspended floors,roofs,landing,beams and balconies (Plan area to be measured)	Sqm	27800.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		STEEL REINFORCEMENT				
14	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto Plinth level.				
	5.22.6	Termo – Mechanically Treated Bars	Kgs	596000.0		
15	5.22.A.	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above Plinth level.				
	5.22.A.6	Termo – Mechanically Treated Bars	Kgs	1565000.0		
	6	BRICK & STONE WORK				
	6.1.	Brick work with common burnt clay F.P.S.(non modular) bricks of class designation 7.5 in foundation and plinth in:				
16	6.1.2	Cement mortar 1:6 (1 cement :6 coarse sand)	Cum	50.00		
	6.4	Brick work with F.P.S bricks of class designation 7.5 in superstructure above plinth level up to floor v level in all shapes an sizes in:				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
17	6.4.2	Cement mortar 1: 6 (1 cement :6 coarse sand)	Cum	5300.00		
18	6.13	Half brick masonry with F.P.S brick of class designation 7.5 in superstructure above plinth level up to floor V level				
	6.13.1	CM 1:3 (1 cement : 3 coarse sand)	Sqm	11700.00		
19	6.15	Extra for providing and placing in position 2 Nos. 6mm dia M.S bars at every third course of half brick masonry (with FPS brick)	Sqm	11700.00		
20	4.7	Providing and fixing up to floor five level precast cement concrete solid block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering complete :				
	4.7.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Cum	10.00		
		RANDOM RUBBLE MASONRY				
	7.1	Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) upto plinth level with:				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
21	7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand).	Cum	25.00		
	9	WOOD AND ALUMINIUM WORK				
22	9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position.				
	9.1.1	Second class Teak wood	Cum	0.50		
23	9.5	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws excluding, panelling which will be paid for separately, all complete as per direction of Engineer-in-charge.				
	9.5.1	Second class teak wood 35mm thick shutter	Sqm	7.00		
24	9.7	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 :				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
24.1	9.7.1	Second class teak wood	Sqm	5.00		
24.2	9.7.7.2	5.5 mm thick glass panes	Sqm	5.00		
25	9.72	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :				
	9.72.1	125x85x5.5 mm (heavy type)	each	40.00		
26	9.53	Providing 40 x 5mm flat iron hold fast 40 cm long including fixing to frame with 10mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30 x 10 x 15 cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	Nos	4800.00		
27	9.33	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanized M.S. screws including drilling holes in masonry work / CC / R.C.C. and marking good etc.				
	9.33.4	50mm long	Nos	12800.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
28	9.136	Providing and fixing fire resistance door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I sheet (Zinc coating not less than 120 gm/sqm) duly filled with vermiculite based concrete mix. Suitable for mounting 60 minutes fire rated door shutters. The frame is fitted with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistance primer etc. complete as per direction of Engineering -in -charge (Dash fastener to be paid for separately)	Meter	200.00		
29	9.137	Providing and fixing 50mm tk glazed fire resisting door shutter of 60 minutes fire rating conforming to IS:13614 (part-II) tested and certified as per laboratory approved by Engineering -in -charge with suitable mounting on door frame, consisting of vertical styles, lock rail, top rail 100mm wide, bottom rail 200 mm wide, made out of 16 SWG G>I sheet (Zinc coating not less than 120 gm/mm ²) duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistance primer etc. all complete as per direction of Engineering -in -charge (Paneling to be paid for separately)	Sqm	90.00		
30	9.138	Providing and fixing glazing in fire resisting door shutter, fixing panels, and partitions etc. with G.I bearing of approved size made out of 20 SWG G.I sheet (Zinc coating not less than 120 gm/mm ²), fire resistant sealant, including applying a coat of approved fire resistant primer on G.I. bearing etc. complete all as per direction of Engineering-in-charge.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	9.138.1	with clear fire resistant glass panes 6 mm tk of approved brand, having minimum 60 minutes fire resistance.	Sqm	80.00		
31	9.139	Providing and fixing panic bar/ latch (Double point) fitted with a single body, Trim latch & lock on brick side of the panic latch of reputed brand and manufacture to be approved by the Engineering-in-charge.all complete.	Sqm	30.00		
32	9.74	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
	9.74.1	250x10 mm	Nos	8.00		
33	9.75	Providing and fixing bright finished brass door latch with necessary screws etc. complete :				
	9.75.1	300x16x5 mm	Nos	4.00		
34	9.81	Providing and fixing bright finished brass handles with screws etc. complete				
	9.81.1	125 mm	Nos	8.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
35	9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	Nos	4.00		
36	9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm) with necessary accessories and screws etc. complete.	Nos	35.00		
37	9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Nos	35.00		
38	9.97	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc., complete.				
38.1	9.97.2	250 x 10mm	each	1500.00		
38.2	9.97.4	150 x 10mm	each	600.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
39	21.13	Providing and fixing 100mm brass locks (best make of approved quality) for aluminum doors including necessary cutting and making good etc. complete	Nos	600.00		
40	9.100	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc., complete.				
	9.100.2	100mm	Nos	1650.00		
41	9.101	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating note less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc., complete.				
	9.101.1	Single rubber stopper	Nos	800.00		
42	9.84	Providing and fixing IS : 3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws etc., complete.	Nos	700.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
43	9.117	Providing and fixing factory made UPVC door frame made of UPVC extruded section having an overall dimensions as below (tolerance $\pm 1\text{mm}$), with wall thickness 2.0mm ($\pm 0.2\text{mm}$), corners of the door frame to be joined with galvanized brackets and stainless steel screws, joints mitered and plastic welded. The hinged side vertical of the frames reinforced by galvanized M.S. tube of size 19x19 mm and 1mm ($\pm 0.1\text{mm}$) wall thickness and 3 nos. Stainless steel hinged fixed to the frame complete as per manufacturers Specification and direction of engineering -in-change				
	9.117.1	Extruded section profile size 48x40 mm	meter	1600.00		
	9.118	Providing and fixing existing door frames:				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
44	9.118.1	24 mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24 mm and wall thickness 2 mm (± 0.2 mm) with in built edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanized / plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanized M.S. tube of size 20x20 mm and 1mm (± 0.1 mm) wall thickness. The lock rail made up of " H" section, a UPVC hollow section of size 100x24 mm and 2mm (± 0.2 mm) wall thickness, fixed to the shutters styles by means of plastic/ galvanized M.S.'U' cleats. The shutter frame filled with a UPVC multi chambered single panel of size not less than 620mm, having over all thickness of 20mm and 1mm (± 0.1 mm) wall thickness. The panes filled vertically and tie bar at two places by inserting horizontally 6mm galvanized M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer- in - charge. (for W,C and bath room door shutter).	Sqm	500.00		
		Aluminium Windows & Ventilators				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
45	21.1	Providing and fixing aluminum work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate z sections and other sections of approved make confirming to IS : 733 and IS : 1285 fixed with fixed with raw 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, mitered 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).				
	21.1.1	For fixed portion				
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kgs	37100.00		
46	21.1.2	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 PVC / neoprene gasket required (fittings shall be paid for separately)				
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kgs	27800.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
47	21.2	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS : 12823 Grade I type II in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc., complete as per architectural drawings and directions of engineer-in-charge.				
	21.2.2	Prelaminated particle board with decorative lamination on both sides.	Sqm	1400.00		
48	21.3	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).				
48.1	21.3.2	With float glass panes of 5.5 mm thickness	Sqm	2550.00		
48.2	21.3.3	With float glass panes of 8 mm thickness	Sqm	800.00		
	9.24	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded)(overall area of door shutter to be measured)				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
49	9.24.1	Rectangular or square	Sqm	45.00		
50	21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piect M.S. sheet outer box with side plate etc., complete as per the direction of Engineer-in-charge.				
	21.4.1	With stainless steel cover plate	Each	210.00		
51	21.8	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 Enginner-in-charge complete.				
	21.8.1	Upto 5mm depth and 5mm width	meter	6800.00		
52	21.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc. to be paid separately)	Sqm	10.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
53	MR	Providing and fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge Door handle, lock and stopper etc.	nos	6.00		
54	21.17	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	Kgs	6750.00		
55	9.64	Providing and fixing ISI marked 85x42mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete.	Each	600.00		
		STEEL WORKS				
56	10.28	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 bolt 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 Engineering-in-charge .(for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)	Kgs	10100.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
57	9.48	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				
	9.48.2	Fixed to openings with rawl plugs screws etc.	Kgs	52600.00		
58	Code 1220	Providing and fixing Wire mesh (rabbit) nominal wide manufactured out of hot dipped galvanised iron of nominal thickness , along route of walls chipped for services, junction between RCC and brick walls including cost of materials, labour for fixing, with all lead and lifts and all incidental charges, complete as per specification and as directed by the engineer in charge. (length of mesh only be measured for payment)	meter	3000.00		
59	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete: (OTS area)	Kgs	30500.00		
60	10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 – part 1 and M.S. top cover of required thickness for rolling shutters.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
60.1	10.06.1	80x1.25mm M.S. laths with 1.25 mm thick top cover.	Sqm	70.00		
60.2	10.7	Providing and fixing ball bearing for rolling shutters.	each	10.00		
		FLOORING				
61	11.3	Cement concrete flooring 1:2:4 (1 cement : 2coarse and : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete				
	11.3.1	40mm thick with 20mm nominal size stone aggregate.	Sqm	50.00		
		GRANITE STONE FLOORING				
62	8.2	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm 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, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	8.2.2.2	Area of slab over 0.50 sqm.	Sqm	3500.00		
62.1	11.24	Extra for pre finished nosing to treads of steps of granite stone.	meter	2900.00		
62.3	MR	Extra for making rough surface / 3 groves to treads of steps of granite stone.	meter	2900.00		
62.4	11.25	Extra for Granite stone flooring in treads of steps and risers using single length up to 2.00 metre	Sqm	2900.00		
63	7.38	Stone cladding work for wall lining upto 10m height with special adhesive over 12mm thick bed of cement mortar 1:3 (1cement : 3coarse sand) including pointing in white cement with an admixture of pigment to match the stone shade.				
	7.38.1.1 & 7297 & 2750	Granite stone 18mm thick of any colour and shade	Sqm	1800.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
64	8.6	Mirror polishing on marble work/Granite stone work where ever required to give high gloss finish complete.	Sqm	5300.00		
65	8.3.2	Extra for providing edge moulding to 18mm thick granite stone counters. Vanities etc. item including machine polishing to edge to give high glass finish etc. complete as per design approved by Engineer- in - charge.	meter	400.00		
66	8.5	Extra for prviding opening of required size and shape for wash basins/kitchen sink in kitchen platform, vanity counters and similar location in granite stone work including necessary holes for pillar taps etc.including rubbing and polishing of cut edges etc.complete.	Each	175.00		
67	8.10	Providing and fixing stone slab table rubbed, edges rounded and polished of size 75x50 cm deep and 1.8 cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.				
	8.10.2	Granite Stone of approved shade	Sqm	50.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
68	11.20	Chequered precast cement concrete tiles 22mm thick in footpath ,Ramp & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand)				
	11.20.3	Dark shade using ordinary cement	Sqm	2500.00		
		VITRIFIED FLOOR TILES				
69	11.41	Providing and laying polished vitrified floor tile in different sizes (thickness to be specified by the manufacturer) with Acid and / or Alkali resistant tiles and water absorptions less than 0.08% and confirming to IS:15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement:4 Coard sand) including grouting the joints with white cement and matching pigments etc. complete. (Basic Rate : Rs. 110/Sqft)				
	11.41.2	Size of Tiles 60 x 60 cm	Sqm	10500.00		
70	11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer) with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours & shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	11.46.2	Size of Tiles 60 x 60 cm	Sqm	1200.00		
		KOTA STONE FLOORING				
71	11.26 .1	Kota stone flooring over 20mm (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 1:4 (1 cement : 4 coarse sand) : 25mm thick (Basic Rate: Rs. 45/Sqft)	Sqm	2350.00		
72	11.39	Providing and laying rectified Anti skid Glazed Ceramic floor tiles 300x300mm or more (thickness to be specified by the manufacturer) of 1 st quality conforming to IS : 15622 of approved make in colours white,Ivory, Grey, Fume, Red Brown, laid on 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand)including grouting the joints with white cement and matching pigments etc.complete.	Sqm	1300.00		
73	11.36	Providing and fixing 1st quality joint free germs free ceramic glazed wall tiles confirming to IS: 15622(thickness to be specified by the manufacture)of approved make in all coloures,shades except burgundy,Bottle green,Black of any size as approved by Engineer-In -Charge in skirting,risers of steps and dados over 12mm thick bed of cement Mortor 1:3 (1 cement :3Coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	Sqm	27700.00		
		POLYVINYL CHLORIDE SHEET FLOORING				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
74	MR	Providing and fixing homogeneous antistatic Polyvinyl chloride sheet roll from fused jointed in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality and manufacturer like Dunlop S-758, Fevicol SR 998, Pidilite or equivalent as per IS 3462, BS 2050 & BS 3261 including rolling with light wooden roller weighing about 5 kg and having surface resistance in the range of $4 \times 10^4 \Omega$ - $5 \times 10^8 \Omega$ all complete as directed by Engineer-in-charge, in approved colour and shade.- Pidilite Roffler antistatic SL or equivalent. .2 mm Thick sheet	Sqm	2100.00		
75.00	MR	Providing and laying an Epoxy bases Antistatic flooring with the following operations.Preparing the surface of floor by etching ,cleaning etc. Providing and applying one coat of epoxy primer Dr.Fixit pidipoxy EP of M/s pidilite Industries Ltd..Providing and applying one coat of Rofflor Antistatic SL undercoat of M/S Pidilite or equivalent having surface resistance in the range of $3 \times 10^3 \Omega$ - $9 \times 10^6 \Omega$.Providing and laying with Rofflor Antistatic SL conductive topcoat of M/S Pidilite or equivalent around 2mm thick,having surface resistance range of $5 \times 10^4 \Omega$ - $1 \times 10^6 \Omega$ ($0.05 M \Omega$ to $1 M \Omega$) as per the manufacturer etc complete	Sqm	500.00		
		ROOFING				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
76	12.47	Providing and fixing UV stabilized fibre glass reinforced plastic sheet roofing up to any pitch including fixing with polymer coated 'J' or 'L' hooks, bolts and nuts 8mm dia GI plain/bitumen washers complete but excluding the cost of purling rafters, trusses etc the sheets shall be manufactured out of 2400 TEX panel roving incorporating minimum 0.3% Ultra-violet stabilizer in resin system under approximately 2400 psi and hot cured. They shall be uniform pigmentation and thickness without air pockets and shall confirm to IS 10192 and IS 12866.The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.				
	12.47.1	2mm thick corrugated (2.5" or 4.2" or 6") or step down (2" or 3" or 6") as specified)	Sqm	1200.00		
		FALSE CEILING				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
77	MR	Providing and fixing in true horizontal level false ceiling grid of XL 24mm system manufactured by M/s. AMF / ARMSTRONG using hot dipped galvanized steel section, exposed surface chemically cleaned capping pre-finished in baked polyest paint wall angle of size 3000 x 19 x 19mm used in the periphery of the ceiling fixed to the wall partition / R.C. Column / band walls with the help of screws at 600 mm C/C. Main runner of size 3000 x 24 x 32mm suspended at a 1200mm C/C by using 2mmdia. G.I. wire hanger securely fixed to the structural soffit of RC slab by using 6mm anchor fastener at every 1200mm (max) and 1200mm long cross tee of size 24 x 27mm to be interlocked between in Main runner at 600mm C/C (max) to form a grid of 1200 x 600mm. 600mm long cross tee of size 24 x 27mm fixed in between 1200mm long cross tee for forming a grid of 600 x 600mm. Finally laying AMF THERMATEX FEINGELOCHT WITH HYGENA COATING NRC 0.6 / ARMSTRONG 15mm thick BIO GUARD CEILING TILES manufactured by M/s. ARMSTRONG WORLD INDUSTRIES LTD having firerating of 60 minutes as per BS 476/23 of 1987, Noise Reduction(for ICU and etc areas) including providing wooden push and slide type trap door (wherever necessary) of size 1mx1m for indoor AC units with necessary frames etc. as per the direction of Engineer in charge.	Sqm	1750.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
78	MR	Providing and fixing in true horizontal level false ceiling grid of XL 24mm system manufactured by M/s. ARMSTRONG WORLD INDUSTRIES LTD using hot dipped galvanized steel section, exposed surface chemically cleaned capping pre-finished in baked polyester paint wall angle of size 3000 x 19 x 19mm used in the periphery of the ceiling fixed to the wall partition / R.C. Column / band walls with the help of screws at 600 mm C/C. Main runner of size 3000 x 24 x 32mm suspended at a 1200mm C/C by using 2mm dia. G.I. wire hanger securely fixed to the structural soffit of RC slab by using 6mm anchor fastener at every 1200mm (max) and 1200mm long cross tee of size 24 x 27mm to be interlocked between in Main runner at 600mm C/C (max) to form a grid of 1200 x 600mm. 600mm long cross tee of size 24 x 27mm fixed in between 1200mm long cross tee for forming a grid of 600 x 600mm. Finally laying ARMSTRONG or AMF THERMATEX FEINFRESKO SK NRC 0.6 / ARMSTRONG 15mm thick MINATUF BUTT EDGE MINERAL FIBRE ACOUSTIC CEILING TILES manufactured by M/s. ARMSTRONG WORLD INDUSTRIES LTD having fire rating of 60 minutes as per BS 476/23 of 1987, Noise Reduction (for wards, Dr. rooms, waiting & common areas) including	Sqm	12100.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
79	MR	Exposed ceiling shall be insulated with 50mm thick normal density (not less than 16KG/Cum).Treated for fire quality (TF) Expanded polystyrene on the bottom surface of the exposed ceiling .PVC ravel shall be driven on the ceiling in a pattern 1Mx1/2 M.G.I. Wires shall be drawn from the G.I .screws fix to the ravel.Surface shall be removed thoroughly cleaned with wire brush ;dirt,grease and dust shall be removed thoroughly.A coat of bituminous primer shall be applied over the complete surface of the ceiling .Bitumen grade 85/25 confirming to IS 702 shall be applied over the complete surface both as adhesive and as vapour barrier at the rate of minimum 1.8 kg/sqmt.no area should left out without Bitumen .50mm thick EPS shall be fixed over the Bitumen drawing the G.I wire through the corners of the four EPS slabs.EPS slabs shall be gripped in position by tying the G.I wire with 4"x4" G.I sheets washers on all corners .All the slab joints shall be packed with Bitumen .	Sqm	12000.00		
80	MR	Supplying and applying two coats with heat reflective paint over weathering course in terrace including materials ,labour etc complete.- Excel cool coat sun sheital , Sun cool coat.	Sqm	5300.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
81	12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the rate of 1200 mm centre to centre to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceilingsection and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm or both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :				
81.1	12.45.2	12.5 mm thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part I.	Sqm	2727.01		
81.2	12.45.3	12.5 mm thick tapered edge gypsum moisture resistant board.	Sqm	1250.00		
	13	FINISHING				
		Internal Plastering				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
82	13.2.1	15mm cement plaster on the rough side of single or half brick wall of mix : 1 : 4 (1 cement : 4 fine sand)	Sqm	61950.00		
		External Plastering				
83	13.2.1	15mm cement plaster on the rough side of single or half brick wall of mix : 1 : 4 (1 cement : 4 fine sand)	Sqm	17100.00		
83.1	13.22	Extra for plastering exterior walls of height more than 10m from ground level for every additional height of 3m or part thereof				
		more than 10m not exceeding 13m	Sqm	11600.00		
84	13.30	18mm thick moulded cement mortar band in two coats under layer 12mm thick with mortar 1:5(1cement: 5coarse sand) top layer 6mm thick with cement mortar 1:4(1cement:4 fine sand)-2.5cm wide band	meter	4800.00		
		Ceiling Plastering				
85	13.1.1	12mm cement plaster of mix 1:4 (1 cement : 4 fine sand)	Sqm	2000.00		
		WALL FINISHES				
		INTERNAL				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
86	13.60.1	Wall painting with Plastic emulsion paint of approved brand and manufacture to give an even shade –Two or more coats on new work.	Sqm	36250.00		
87	13.43	Applying one coat of cement primer of approved brand and manufacture on wall surface – Cement Primer	Sqm	36250.00		
88	13.68.1	French spirit polishing : Two or more coats on new works including a coat of wood filler.	Sqm	10.00		
89	13.48.3	Painting Steel work with Delux Multi surface paint to give an even shade.Two or more coat applied @ 0.90 ltr/10sqm over an over an under coat of primer applied @ 0.80ltr/10aqm of approved brand or manufacture.	Sqm	2502.00		
90	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	36250.00		
		EXTERNAL				
	13.45	Finishing wall with textured exterior paint of required shade:				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
91	13.45.1	New work (Two or more coats applied @ 3.28ltr/10 sqm)over and including base coat of water proofing cement paint applied @2.20kg/10sqm)	Sqm	7100.00		
92	13.46	Finishing walls with Acrylic Smooth exterior paint of required shade :				
	13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm).	Sqm	17100.00		
93	13.52	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.				
	13.52.2	On wall surface	Sqm	25.00		
	22	WATER PROOFING				
94	22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., 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.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	ii)	IIInd course of 20mm 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)	IIIrd course of applying blown or residual bitumen aplied hot at 1.7kg per sq.mm of area.				
	iv)	IVth course of 400 micron thick PVC sheet, (Overlaps at joints of PVC sheet should be 100mm wide and pasted to each other with bitumen @ 1.7 Kg/sq.m)	Sqm	1300.00		
95	22.14.1	Grading roof for water proofing treatment with Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 10 mm nominal size)	Cum	270.00		
96	22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	Sqm	5300.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
97	13.21 + 13.7.1 (Rate arrived)	12 mm cement plaster finished with a floating coat of neat cement of mix 1:3 (1 cement: 3 fine sand)				
		Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers	Sqm	6250.00		
		EXPANSION JOINT				
98	5.28	Providing and fixing in position 25mm thick bitumen impregnated fibre board confirming to IS :1838 including cost of primer sealing compound in expansion joints.	100 meter	11000.00		
99	5.27	Providing and filling in position bitumen mix filler of proportion 80 kg of hot bitumen 1 kg of cement and 0.25 cubicmetre of coarse sand for expansion joints – 25mm wide and 25mm depth	100 meter	1900.00		
		MISCELLANEOUS				
100	MR	Supply and Installation of BANDRAIL as approved by Architect of fluted aluminium sections of curved profile finished with powder coating/anodising. Aluminium section shall be 76 mm wide, 1.3 mm thick and maximum length of 3 metres. The section shall be fixed onto the wall/gypsum partition tusing 120 mm long nylon clips fixed at every 610 mm centre to centre.The foil is to be slipped into the slop provided after screw fixing.	meter	1250.00		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
101	MR	L shaped Corner Guard of Aluminum extrusions of approved size in lengths of 1.5 meter. Extrusion shall have an extruded PVC cover with all tools and plant etc complete and as directed by the engineer in charge	meter	1250.00		
102	MR	Providing and fixing aluminium Pergolas in OTS as per the drawing with all lead and lifts, material, labour and all other incidental charges, as per the direction of engineer in charge	Sqm	750.00		
		STRUCTURAL GLAZING				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
103	MR	Providing, fabricating and fixing Semi Unitized Structural glazing system using suitable extruded aluminium section for frames anodised to approved colour of 20 microns. Extruded section to be of aluminium alloy as per ISI 6062 (T5 or T6 with temper) conforming to ASTM B221 or approved equivalent standard. The frames works should have water tight joints and provision for rainwater drainage. MS brackets (hot dip Galvenised) or extruded aluminium section brackets to be fixed to building structure with 10 mm dia anchor fastener. The main aluminium frame to be fixed to bracket with suitable SS bolt/nut washer. The complete framework to be aligned and levelled as required. The reflective glass units are to be glued to separate glass panel frames (made out of suitable aluminium section) with specified /approved structural silicon sealant of Dow corning G.E silicone or approved manufacturer after proper curing & testing sealed manufacture each panel to be fixed to main frame individually with fasteners. After aligning the panel to correct line /levels the gaps between the glass panels to be sealed with weather sealant of approved make. The system should be designed to take horizontal and vertical movement upto 10mm for every floor and capable of withstanding wind pressure of 200 kpa all as per drawing. The system design should be eneric to accommodate double glass or single glass as may be required and gasket based , designed with chamber for pressure equalization. Shop drawing submitted for approval shall show the full detail of fire stons/ smoke seal. The rate include				
		Aluminium main frame : vertical & Horizontal - 130 x 55 (2.3Kg/mt)				
		Glass panel frame ;42 x 38mm (0.73 kg/mt)				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Hermitically sealed Double glass unit overall 23mm thick made of 6mm thick heat strengthened colour coated low emission glass of saint Gobain or equivalent + 12mm air gap + 5mm thick clear annealed glass of saint Gobain or equivalent.	Sqm	750.00		
104	MR	Providing and fixing of Aluminium composite panel of approved make and colour for wall cladding for straight Brick/Rcc/stone walls & columns/beams with necessary aluminium frame works at required level made out of 50x25x3mm C section or equalent. The panel should consist of 2.5 mm thermoplastic core of antitoxic LDPE sandwiched between 0.25 skins thick aluminium sheet making a total panel thickness of 3mm. The surfaces will be finished with PVDF based coating on topsides and service coating on reverse sides would be in polyester paint. The system shall be fixed using GI brackets, aluminium L cleats and stainless steel bolts and nuts complete with spring washer and cap nuts and all other necessary accessories, sealing shall be done using weather sealant of Dow Corning 789 with necessary rods etc., complete..	Sqm	1800.00		
		CIVIL COST			Rs.	

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
INTERNAL & EXTERNAL PLUMBING AND SANITATION WORKS						
1	M.R	Providing and fixing white vitreous china Wall Mounted type water closet (European type W.C.pan) with seat and lid, 3/6 litre low level white vitreous Dual Flushing cistern and C.P flush bend with fitting and C.I brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required. Make:Hindware,Cera,Jaquar etc.,				
a)	M.R	WC pan with ISI marked white solid plastic seat and lid	Nos.	175		
2	17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, 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 :				
a)	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests. Make:Hindware,Cera,Jaquar etc.,	Nos.	50		
3	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931. Make:Hindware,Cera,Jaquar etc.,				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)	18.49.1	15 mm nominal bore.	Nos.	50		
4	17.7	Providing and fixing wash basin with CI / MS brackets, 15mm CP brass Pillar taps, 32mm CP brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required.				
a)	17.7.1	White Vitreous China Wash basin size 630 x 450mm with a single 15mm C.P brass pillar tap. Make:Hindware,Cera,Jaquar etc.,	Nos.	200		
5	17.1	Providing and fixing Stainless Steel A ISI 304 (18/8) 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 :				
	17.10.2	Kitchen sink without drain board				
	17.10.2.1	610x510 mm bowl depth 200 mm.	Nos	50		
6	MR	Providing and fixing C.P. long body sink mixure bib tap of approved quality . Make:Hindware,,Jaquar etc., for sink	Nos	50		
5	MR	Providing and fixing CP Bottle Trap for Wash basin and sink				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5.1		Bottle trap 32mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260 gms. Make:Hindware,Jaquar etc., for WB	Nos.	200		
5.2		Bottle trap 40mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260 gms. Make:Hindware,Jaquar etc., for Sink	Nos.	50		
6	17.69	Providing and fixing CP Waste coupling for wash basin and sink of approved quality, colour and make.				
a)	17.69.2	b) Waste coupling 31mm dia of 79mm length and 62mm breadth, weighing not less than 45 gms. Make:Hindware,Jaquar etc.,	Nos.	200		
b)	17.69.2	b) Waste coupling 38mm dia of 83mm length and 77mm breadth, weighing not less than 60 gms. Make:Hindware,Jaquar etc.,	Nos.	50		
7	17.5	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors wherever required : Make:Hindware,Cera,Jaquar etc.,				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)	17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.	Nos.	50		
8	17.28	Providing and fixing PVC Waste pipe for sink or wash basin including PVC waste fittings complete.				
	17.28.1	Semi rigid pipe				
a)	17.28.1.1	32mm dia	each	25		
b)	17.28.1.2	40mm dia	each	10		
9	MR	Providing and fixing Soap Dish approved make. Make:Hindware,Cera,Jaquar etc.,	Nos.	130		
10	17.34	Providing and fixing Toilet paper holder . Make:Hindware,Cera,Jaquar etc.,				
	17.34.1	C.P Brass	Nos.	175		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
11	17.31	Providing and fixing 600 x 450mm bevelled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Nos.	200		
12	MR	Providing and fixing CP Towel ring trapzoidal shape 215mm long, 200mm wide with a minimum distances of 37mm from wall face with concealed fittings arrangement of approved quality, colour and make weighing not less than 90 gms. Make:Hindware,Cera,Jaquar etc.,	Nos.	130		
13	18.51	Providing and fixing C.P brass Long body bib cock of approved quality conforming to IS standards and weighing not less than 690gms. Make:Hindware,Cera,Jaquar etc.,				
a)	18.51.1	15mm nominal bore	Nos.	25		
14	18.16	Providing and fixing C.P. brass Stop cock (concealed) of approved quality. Make:Hindware,Cera,Jaquar etc.,				
a)	18.16.1	15mm nominal bore	Nos.	550		
15	M.R.	Providing and fixing of CP brass Two way coat hooks of superior quality with CP screws. Make:Hindware,Cera,Jaquar etc.,	Nos.	270		
16	MR	Providing & fixing of CP Health faucet. Make:Hindware,Cera,Jaquar etc.,				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)		CP angle stop cock with all flange.				
b)		PVC flexible tube				
c)		Hand operated spray unit (instand type).	Set	175		
17	M.R.	Providing and fixing of over head shower set with shower flange 170 mm long, including shower head and shower arm conforming to I.S Specification of approved make as per directions including all lead and lift etc., complete.	Nos.	75		
18	M.R.	Providing and fixing of CP brass 15 mm dia, 2 in 1 exposed wall mixer cum spout for wall installation with lever control and necessary CP bend for shower connection, including cutting and making good the walls complete as per sample approved by the EIC.	Nos.	75		
19	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for Hot and Cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in charge. Make:Supreme,Finolex,Prince etc.,				
		Internal Work - Exposed on wall				
a)	18.7.2	20mm nominal outer dia.Pipes	Mtr.	12		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
b)	18.7.3	25mm nominal outer dia.Pipes	Mtr.	36		
c)	18.7.4	32mm nominal outer dia.Pipes	Mtr.	100		
d)	18.7.5	40mm nominal outer dia.Pipes	Mtr.	75		
e)	18.7.6	50mm nominal outer dia.Pipes	Mtr.	1584		
f)	18.9.7	62.5mm nominal inner dia.Pipes	Mtr.	1596		
g)	18.9.8	75mm nominal inner dia.Pipes	Mtr.	50		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
h)	18.9.9	100mm nominal inner dia.Pipes	Mtr.	3444		
20	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for Hot and Cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes and 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. Make:Supreme,Finolex,Prince etc.,				
		Concealed work including cutting chases and making good the wall etc.				
a)	18.8.1	15mm nominal outer dia.Pipes	Mtr.	850		
b)	18.8.2	20mm nominal outer dia.Pipes	Mtr.	1500		
c)	18.8.3	25mm nominal outer dia.Pipes	Mtr.	800		
d)	18.8.4	32mm nominal outer dia.Pipes	Mtr.	250		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
e)	MR	40mm nominal outer dia.Pipes	Mtr.	50		
21	18.18	Providing and fixing Ball Valve (brass) of approved quality, High or low pressure, with plastic floats complete. Make:Lehry,Supreme,Finolex,Prince etc.,				
	18.18.2	20mm dia nominal bore	Nos.	10		
22	18.17	Providing and fixing Gun metal gate valve with C.I. wheel of approved quality (screwed end). Make: Lehry,Supreme,Finolex,Prince etc.,				
a)	18.17.1	25 mm dia nominal bore	Nos.	1050		
b)	18.17.2	32 mm dia nominal bore	Nos.	15		
c)	18.17.3	40 mm dia nominal bore	Nos.	10		
d)	18.17.5	65 mm dia nominal bore	Nos.	5		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
e)	18.17.6	80 mm dia nominal bore	Nos.	5		
23	MR	Providing and fixing in position Butterfly Valve with CI wheel of approved quality including cost of all materials and labour with all leads complete as per specifications. Make:Lehry etc.,				
a)		100 mm dia nominal bore	Nos.	2		
24	18.77	Cutting holes upto 15 x 15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including finishing complete.	each	60		
25	M.R.	Providing and fixing PVC soil, waste and vent pipe to IS : 13592 of SWR quality 4kg / sq.cm pressure rated up to 110mm dia and 6 kg / sq.cm pressure rated agricultural series above 110mm, including all fittings, like EG : Bends, Tees, Elbows, Collars, junction, inspection doors, cowls, offsets, access pipes, jointing with rubber ring / solvent cement by application of leak proof adhesive like FRP paste including cutting holes in walls and floors and making good. Make:Supreme,Finolex,Prince etc.,				
a)		40mm dia (4kg / sq.cm)	Mtr.	45		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
b)		50mm dia (4kg / sq.cm)	Mtr.	100		
c)		63mm dia (4kg / sq.cm)	Mtr.	15		
d)		75mm dia (4kg / sq.cm)	Mtr.	2748		
e)		90mm dia (4kg / sq.cm)	Mtr.	10		
f)		110mm dia (4 kg / sq.cm)	Mtr.	1932		
g)		Supplying conveying and laying 110mm dia PVC pipe (12 kg/sq.m) for pumping main from water treatment plant to sump and sump to OH tank including all fittings such as bend, tee, clamps etc complete	Mtr.	300		
		Rain Water Pipe				
h)		110mm dia (6 kg / sq.cm)	Mtr.	35		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
i)		160mm dia (6 kg / sq.cm)	Mtr.	774		
26		Providing and fixing Vent Cowl				
26.1	3735	S.C.I. S&S, Slotted Cowl (Terminal Guard) 100 mm	Nos	60		
26.2	3734	S.C.I. S&S, Slotted Cowl (Terminal Guard) 75 mm	Nos	65		
27	MR	Providing and fixing to the Inlet mouth of rain water pipe S.S grating 150mm diameter and weighing not less than 440 grams.	Nos	30		
28	MR	Providing and fixing to the Inlet mouth of rain water pipe S.S grating 110mm diameter and weighing not less than 440 grams.	Nos	10		
29	12.43	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)	12.43.1	75 mm	Nos	10		
b)	12.43.2	110 mm	Nos	160		
c)	MR	150 mm	Nos	500		
30	M.R.	Providing and fixing PVC floor trap self cleansing design with or without vent arm complete including cutting and making good the walls and floors. Make:Supreme,Finolex,Prince etc.,				
a)		110mm dia inlet 110mm dia outlet	Nos	100		
b)		50mm dia inlet 75mm dia outlet	Nos	400		
31	M.R	Providing and fixing CP grating of 6mm thick with rim including setting in floor with white cement mortar and making good the floor (Chilli make)				
a)		125mm dia	Nos.	100		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Gunmetal non-return valve-vertical (screwed end) 80 mm dia	Nos.	10		
	MR	Gunmetal non-return valve-vertical (screwed end) 100 mm dia	Nos.	5		
32	18.36	Constructing Masonry Chamber 60x60x75, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for sluice valve, with CI surface box 100mm, top diameter, 160mm bottom diameter and 180mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 grades 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.	Nos.	50		
33	19.7	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with 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 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
34	19.7.2	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) :				
	19.7.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Nos.	20		
35	19.7.3	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) :				
	19.7.3.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Nos.	5		
36	19.8	Extra for depth for manholes				
	19.8.2	Size 120x90 cm				
	19.8.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Rmt	50		
37	19.4	Providing and fixing square – mouth S.W. Gully trap grade “A” complete with CI grating brick masonry chamber with water tight tight CI cover with frame of 300 x 300mm 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				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)	19.4.2	150 x 100mm size P type.				
b)	19.4.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	50		
38	MR	Providing and laying with the base concrete 1:3:6 with UPVC pipes 6.00 kgf/sq.cm working pressure 110mm outside diameter, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all material, labour charges. HOM of equipments and testing, excluding cost of fittings, complete as per specifications. (External Sewerage Line)	Mtr.	100		
39	MR	Providing and laying with the base concrete 1:3:6 with UPVC pipes 6.00 kgf/sq.cm working pressure 160mm outside diameter, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all material, labour charges. HOM of equipments and testing, excluding cost of fittings, complete as per specifications. (External Sewerage Line)	Mtr.	1100		
40	MR	Providing and laying with the base concrete 1:3:6 with UPVC pipes 6.00 kgf/sq.cm working pressure 200mm inside diameter, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all material, labour charges. HOM of equipments and testing, excluding cost of fittings, complete as per specifications. (External Sewerage Line)	Mtr.	522		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
41	2.1	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 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 consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				
	2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	Rmt	2000		
42	MR	Providing and laying non - pressure NP3 class (light duty) R.C.C pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete				
a)		150mm dia. R.C.C. pipe	Mtrs	50		
b)		250mm dia. R.C.C. pipe	Mtrs	75		
43	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	Ltrs	15000		
		TOTAL COST				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
STORM WATER DRAINAGE						
		EARTH WORK EXCAVATION				
1	2.8	Earth work in excavation in foundation trenches or drains (not exceeding 1.5mm in width or 10 sq.mm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5mm including getting out the excavated soil and disposal of excavated soil as directed, with in lead of 50m..				
		All kinds of soil	Cum	650		
	2.26	Extra for every additional lift of 1.5m or part thereof in.				
2	2.10.1	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 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 consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil				
	2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	m	400		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
3	1.1.2	Depositing off excavated materials beyond the initial lead of 50m and upto 5km including the cost of labour, cost of equipment and machinery cost of hire charges of machinery lead & lift loading and unloading, transportation, levelling the excavated material at disposal yard and all other incidental charges etc., complete. The work shall be carried out as per the directions of the Engineer in charge of the works.	cum	450		
		CONCRETE WORK				
4	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All works upto plinth level.				
4.1	4.1.6	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size).	cum	86.15		
4.2	4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	200		
		RCC Work				
5	5.12	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement, with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size).	cum	50.00		
6	4.3	Centering and shuttering including strutting, propping etc. and removal of form work for :				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	4.3.2	Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc..	sqm	2710		
		STEEL REINFORCEMENT				
7	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	5.22.6	Termo – Mechanically Treated Bars				
		Upto Plinth level	Kg	4450		
		BRICK WORK				
8	19.3	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 :				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	19.30.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	20		
9	19.31	Extra for depth beyond 45 cm of brick masonry chamber :				
	19.31.1	For 455x610 mm size	Rmt	20		
	13	FINISHING				
10	13.7	12 mm cement plaster finished with a floating coat of neat cement of mix :				
	13.7.1	1:3 (1 cement: 3 fine sand)	sqm	2150		
11	MR	Providing and laying u 160mm redgid uPVCn 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.for connecting rain water to drain including all specialist fittings etc complete.	Rmt	400		
12	MR	Conveying from casting yard and placing in position precast R.C.C cover slab of drain, including of all labour, mortar for leveling, etc complete.	each	1024		
		TOTAL COST				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
RAIN WATER HARVESTING						
1		EARTH WORK EXCAVATION				
1.1	2.8	Earth work in excavation in foundation trenches or drains (not exceeding 1.5mm in width or 10 sq.mm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5mm including getting out the excavated soil and disposal of excavated soil as directed, with in lead of 50m..				
1.1.2	2.8.1	All kinds of soil up to 1.5m depth	Cum	300		
1.2.1	2.8.1 +2.26.1	Do do 1.5m to 3.0m do do	cum	210		
1.3	2.27	Supplying and filling, in plinth with river sand under floors including, watering, ramming consolidating and dressing complete.	cum	151		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
1.4	1.1.1	Depositing off excavated materials beyond the initial lead of 50m and upto 2 km including the cost of labour, cost of equipment and machinery cost of hire charges of machinery lead & lift loading and unloading, transportation, levelling the excavated material at disposal yard and all other incidental charges etc., complete. The work shall be carried out as per the directions of the Engineer in charge of the works.	cum	510		
2		CONCRETE WORK				
2.1	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All works upto plinth level.				
2.1.1	4.1.8	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size)	cum	19		
3		RCC WORK				
3.1	5.36	Providing and placing in position precast reinforced cement concrete perforated slab square or rectangular as per design and shape in 1:1.5:3 (1 cement 1.5 coarse sand : 3 graded stone aggregate 10mm nominal size) including finishing smooth with 6mm thk cement mortar 1:3 (1 cement : 3 sand) on exposed surface. Providing formwork in precasting handling, hoisting, centering and erection, flush or deep ruled pointing at joints in CM 1:2 (1 Cement : 2 coarse sand) etc complete but excluding cost of reinforcement.	cum	15		
4		REINFORCED STEEL				
4.1	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
4.1.1	5.22.6	Termo – Mechanically Treated Bars				
		a) Upto Plinth level	Kg	1500		
5		BRICK WORK				
5.1	6.1.	Brick work with with F.P.S. brick of class designation 50 in foundation and plinth in:				
5.1.1	6.1.2	Cement mortar 1:6 (1 cement :6 coarse sand)	cum	158		
6		FILLING				
6.1	7754 & 6501&2. 27	Supplying and filling, in plinth with Gravel under floors including, watering, ramming consolidating and dressing complete.	cum	66		
6.2	16.3.4&2. 25	Supplying and Stacking and laying of brick aggregate 120mm to 40mm	Cum	66		
7		PIPES				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
7.1	19.6	Providing and laying of non - pressure NP2 (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2(1 cement :2 fine sand) including testing of joints etc complete.				
7.1.1	19.6.2	150mm dia	Rmt	50		
		TOTAL COST				
Note: 30 No's of Rain water harvesting pits						
INTERNAL ROADS						
	Code No.					
1	2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. All kind of soil	m3	800		
2	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating the 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 earth lead upto 50 metres	Sqm	2750		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
3	16.79	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 mechanical mix plant, carriage of mixed material by tipper to site, for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.	cum	800		
4	16.55	Providing and laying bituminous macadam using crushed stone aggregates of specified grading premixed with bituminous binder, transported to site by tippers, laid over a previously prepared surface with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.				
	16.55.1	50 mm average compacted thickness with bitumen of grade VG-30 @3.50% (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	150		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5	16.56	Providing and laying semi- dense Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.				
	16.56.1	25 mm compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	Sqm	2750		
6	16.75	Providing and laying C.C pavement of mix M25 with ready mixed concrete from batching plant .The ready mixed concrete shall be laid and finished with screed board vibrator,vacuum dewatering process and finally finished by floating brooming with wire brush etc.complete as per specifications and directions of Engineer-in-charge(The panel shuttering work shall be paid for separately)	Cum	50		
7	16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction and of approved size and design /shape laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand filling the joints with coarse sand etc.all complete as per the direction of Engineer- In charge.	Sqm	1000		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
8	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 cement in position to the required line, level and curvature jointed with cement mortar 1:3 (1cement :3 coarse sand) including making joints with or without grooving (thickness of joints except at sharp curve shall not be 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.)	Cum	50		
9	13.62	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade				
	13.62.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	Sqm	310		
10	16.48	Painting road surface marking with adequate no. of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete.				
	16.48.1	New work (Two or more coats).	Sqm	20		
		TOTAL COST				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
INTERNAL ELECTRICAL SUMMARY						
I		POINT WIRING				
II		SUB-DISTRIBUTION BOARDS				
III		CABLE LAYING, TERMINATION AND CABLE TRAY				
IV		EARTHING & LIGHNING PROTECTION				
V		LT CABLES				
VI		GROUP WIRING, PHASE SEG. DB & MCCB				
VII		TELEPHONE AND NET WORK SYSTEM				
VIII		LIGHTING FIXTURES				
		TOTAL COST				
INTERNAL ELECTRICAL WORKS						
I		POINT WIRING				
1		Point Wiring in Steel Conduit with Modular Type Switch:				
		Wiring for light point / fan point / exhaust fan point / call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface/recessed steel conduit with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sqmm, FR PVC insulated copper conductor single core cable etc. as required.				
		Group C	Point	2900		
2		Twin control point wiring in steel conduit, with modular type switch				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Wiring for twin control light point with 1.5sq.mm FR PVC insulated copper conductor singlecore cable in surface/ recessed steel conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sqmm FR PVC insulated copper conductor single core cable etc as required	Point	40		
3		Circuit / Submain Wiring in Steel Conduit:				
		Wiring for circuit/submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/recessed steel conduit as required.				
a)		2x1.5sq.mm + 1x1.5sq.mm earth wire	m	10000		
b)		2x2.5sq.mm + 1x 2.5sq.mm earth wire	m	13000		
c)		2 x4sq.mm +1x 4sq.mm earth wire	m	8400		
d)		2 X 6 sqmm + 1 x 6 sqmm earth wire	m	3000		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
e)		4 x 4 sq mm + 2 x 4 sqmm earth wire	m	950		
f)		4 x 6 sqmm + 2 x 6 sqmm earth wire	m	500		
g)		4 x 10 sqmm + 2 x 10 sqmm earth wire	m	300		
4		S/F MS Conduit:				
		Supplying and fixing of following sizes of steel conduit along with the accessories in surface/ recess including painting in case of surface conduit , or cutting the wall and making good the same in case of recessed conduit as required.				
a)		20 mm	m	1000		
b)		25 mm	m	1000		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
c)		32 mm	m	400		
d)		40 mm	m	300		
e)		50 mm	m	100		
5		S/F Metal Boxes:				
		Supplying and fixing of following sizes (nominal size) on surface or in recesss with suitable size of phenolic laminated sheet cover in front including painting etc as required.				
a)		75mm x 75 mm x 60mm deep	Each	100		
b)		100mm x 100mm x 60mm deep	Each	80		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
c)		150mm x 75mm x 60 deep	Each	60		
d)		150mm x 150mm x 60 deep	Each	40		
6		Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	100		
7		Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	400		
8		Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 1 no. 3 pin 6 amps modular socket outlet and 6 amps modular switch, connection, painting etc. as required	Each	1050		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
9		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 16 & 6 amps modular socket outlet and 16 amps modular switch, connection etc. as required	Each	400		
10		Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	Each	1100		
11		Installation, testing and commissioning of prewired, fluorescent fittings / compact fluorescent fitting / LED of all types, complete with all accessories and tube etc. directly on ceiling /wall, including connections with 1.5 sq.mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	600		
12		Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc., including supplying and fixing ball and socket arrangement, 2 no. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	175		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
13		Providing and fixing extra conduit down rod of 20 mm dia, 2 X 10 cm length wiring with 2 X 1.5 sq. mm FR PVC insulated, copper conductor, single core cable including painting etc. as required. (Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Each	600		
14		Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required.	Each	175		
15		Supplying and fixing extra down rod of 10 cm length G.I. pipe ,15 mm dia, heavy gauge including painting etc. as required. (Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Each	350		
16		Installation of exhaust fan upto 450mm dia sweep in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	Each	190		
17		Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps 'C' series, SP, MCB in sheet steel enclosure on surface or in recess, with chained metal cover for the socket outlet and complete with connections testing and commissioning etc, as required.	Each	40		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
18		Supplying and fixing 30 amps, 415volts, TPN industrial type, socket outlet, with 4 pole and earth, metal enclosed plug top along with 30amps 'C' series, TPN, MCB in sheet steel enclosure on surface or in recess, with chained metal cover for the socket outlet and complete with connections testing and commissioning etc, as required.	Each	12		
		TOTAL OF POINT WIRING				
II		DISTRIBUTION BOARD				
1		Providing and fixing 100A, 16kA rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.	Each	12		
2		Supplying and fixing following ways surface/ recess mounting, vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, with provision of 100 amps TP 16 KA MCCB as incomer, interconnection between incomer MCCB and bus bars (but without MCB's/ MCCB) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
a)		4 way TP	Each	4		
b)		8 way TP	Each	8		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
3		Supplying and fixing following way prewired SP&N MCB distribution board of steel sheet for 240 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required. (But without MCB/ RCCB/ Isolator)				
a)		2 + 4 way, Double door	Nos	3		
b)		2 + 8 way, Double door	Nos	5		
c)		2 + 12 way, Double door	Nos	3		
4		Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)		4 way, Double door	Each	2		
b)		6 way, Double door	Each	2		
5		Supplying and fixing following way prewired vertical type TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, terminal connectors for all incoming and outgoing circuits, duly prewired with adequate size of FR PVC insulated copper conductor upto the terminal connector/ neutral link, earthing etc as required (But without MCB/ RCCB/ Isolator). (Note : Prewired vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
a)		6 way Double door	Each	2		
b)		8 way Double door	Each	2		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
6		Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "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.				
a)		Single pole	Each	1140		
b)		Double pole	Each	50		
c)		Triple pole	Each	20		
d)		Triple pole and neutral	Each	20		
7		Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	620		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
8		Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
a)		25 amps	Each	54		
b)		40 amps	Each	60		
c)		63 amps	Each	48		
9		Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
a)		25 amps	Each	6		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
b)		40 amps	Each	6		
c)		63 amps	Each	8		
10		Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32amps 240 volts "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	Each	12		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
11		Supplying and fixing TP sheet steel enclosure on surface/ recess along with 16/25/32amps 415 volts "C" curve TP MCB complete with connections, testing and commissioning etc. as required.	Each	18		
		TOTAL OF DISTRIBUTION BOARD				
III		CABLE LAYING, TERMINATION AND CABLE TRAY				
1		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.				
a)		Upto 35 sq. mm	m	900		
b)		Above 35 sq. mm and upto 95 sq. mm	m	200		
c)		Above 95 sq. mm and upto 185 sq. mm	m	200		
d)		Above 185 sq. mm and upto 400 sq. mm	m	300		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
2		Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation and refilling the trench etc as required, but excluding sand cushioning and protective covering.				
a)		Upto 35 sq. mm	m	900		
b)		Above 35 sq. mm and upto 95 sq. mm	m	200		
c)		Above 95 sq. mm and upto 185 sq. mm	m	100		
d)		Above 185 sq. mm and upto 400 sq. mm	m	300		
3		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.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)		Upto 35 sq. mm	m	250		
b)		Above 35 sq. mm and upto 95 sq. mm	m	100		
c)		Above 95 sq. mm and upto 185 sq. mm	m	100		
d)		Above 185 sq. mm and upto 400 sq. mm	m	100		
4		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.				
a)		Upto 35 sq. mm	m	450		
b)		Above 35 sq. mm and upto 95 sq. mm	m	100		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
c)		Above 95 sq. mm and upto 185 sq. mm	m	100		
d)		Above 185 sq. mm and upto 400 sq. mm	m	200		
5		Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
a)		Upto 35 sq. mm (clamped with 1mm thick saddle)	m	625		
b)		Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	m	200		
c)		Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	m	150		
d)		Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	m	100		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
6		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.				
a)		Upto 35 sq. mm (clamped with 1mm thick saddle)	m	3000		
b)		Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	m	200		
c)		Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	m	200		
d)		Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	m	100		
7		Supplying and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including inscription duly engraved as required.	each	100		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
8		Supplying and making end termination with brass compression gland and aluminium lugs including gland earthing for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
a)		3.5 C x 300 sq.mm	Each	50		
b)		3.5 C x 240 sq.mm	Each	18		
c)		3.5 C x 185 sq.mm	Each	16		
d)		3.5 C x 120 sq.mm	Each	26		
e)		3.5 C x 70 sq.mm	Each	32		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
f)		3.5 C x 50 sq.mm	Each	30		
g)		3.5 C x 35 sq.mm	Each	40		
h)		3.5 C x 25 sq.mm	Each	112		
i)		4 x 16 sqmm	Each	62		
j)		4 x 10 sqmm	Each	84		
k)		4 x 6 Sq.mm	Each	80		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
l)		2 x 16 sqmm	Each	10		
m)		2 x 10 sqmm	Each	12		
n)		3 C x 10 Sqmm Copper	Each	10		
o)		3 C x 6 Sqmm Copper	Each	40		
p)		3 C x 4 Sqmm copper	Each	60		
q)		4 C x 4 Sqmm copper	Each	6		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
r)		4 C x 2.5 Sqmm copper	Each	8		
s)		12 C x 2.5 Sqmm copper	Each	6		
9		Supplying and installing following size of perforated pre-painted 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, horizontal & vertical bends, reducers, tees, cross members, painting suspenders & all other accessories as required.				
a)		600 mm width x 75mm depth x 2.0 mm thickness	m	100		
b)		300 mm width x 62.5 mm depth x 2.0 mm thickness	m	700		
c)		450 mm width x 62.5 mm depth x 2.0 mm thickness	m	200		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
d)		150mm width x 50 mm depth x 1.6mm thickness	m	300		
10		Providing, laying and fixing following dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc as required				
a)		50 mm dia	m	100		
b)		100 mm dia	m	100		
c)		150 mm dia	m	80		
11		Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)		150 mm dia	m	100		
b)		300 mm dia	m	100		
		TOTAL FOR CABLE LAYING, TERMINATION & CABLE TRAY				
IV		EARTHING & LIGHTNING PROTECTION				
1		Copper earth plate electrode: 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 etc with charcoal or coke and salt complete as required.	Set	20		
2		Earthing with GI 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 etc. with charcoal or coke and salt complete as required.	Set	32		
3		Providing and fixing earth bus of 50 mm x 6 mm copper strip on surface for connections, etc. as required.	m	200		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
4		Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	m	150		
5		Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	m	300		
6		Providing and fixing 25 mm x 5 mm Copper strip on surface or in recess for earth connections etc. as required.	m	375		
7		Providing and fixing 25 mm x 5 mm GI strip on surface or in recess for earth connections etc. as required.	m	2600		
8		Supply and providing 4.0 mm copper wire on surface or in recess for earth connection	m	2500		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
9		Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	m	6500		
10		Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	m	400		
11		Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, copper tube, having single prong at top, with 85 mm dia 3 mm thick copper base plate including holes etc. complete as required.	Each	8		
12		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)	m	600		
12		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)	m	350		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
13		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.	Each	8		
14		Providing and laying G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required.	m	500		
15		Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Set	15		
		TOTAL OF EARTHING & LIGHTNING PROTECTION				
		TOTAL AMOUNT IN RS				
V		LT CABLES				
1		Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date.				
a)		3.5 C x 300 sq.mm	m	950		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
b)		3.5 C x 240 sq.mm	m	200		
c)		3.5 C x 185 sq.mm	m	200		
d)		3.5 C x 120 sq.mm	m	200		
e)		3.5 C x 70 sq.mm	m	350		
f)		3.5 C x 50 sq.mm	m	550		
g)		3.5 C x 35 sq.mm	m	955		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
h)		3.5 C x 25 sq.mm	m	1520		
i)		4 x 16 sqmm	m	1000		
j)		4 x 10 Sq.mm	m	800		
k)		4 x 6 sqmm	m	1500		
l)		2 x 16 sqmm	m	350		
m)		2 x 10 sqmm	m	100		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
B		Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Copper conductor power cable confirming to IS 1554 ammended upto date.				
a)		3 C x 10 Sqmm Cu cable	m	50		
b)		3 C x 6 Sqmm Cu cable	m	400		
c)		3 C x 4 Sqmm Cu cable	m	200		
d)		4 C x 4 Sqmm Cu cable	m	150		
e)		4 C x 2.5 Sqmm Cu cable	m	60		
f)		12 C x 2.5 Sqmm Cu cable	m	120		
		TOTAL OF LT CABLES				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
VI		GROUP WIRING, PHASE SEG. DB & MCCB				
1		Wiring for two light point with 1.5sq.mm FR PVC insulated copper conductor singlecore cable in surface/ recessed steel conduct, one modular switch, modular plate, suitable GI box and earthing the point with 1.5 sqmm FR PVC insulated copper conductor single core cable etc as required	Point	40		
2		Wiring for three light point with 1.5 sq.mm FR PVC insulated copper conductor singlecore cable in surface/ recessed steel conduct, one modular switch, modular plate, suitable GI box and earthing the point with 1.5 sqmm FR PVC insulated copper conductor single core cable etc as required	Point	25		
3		Wiring for Five light point with 1.5sq.mm FR PVC insulated copper conductor singlecore cable in surface/ recessed steel conduct, One modular switch, modular plate, suitable GI box and earthing the point with 1.5 sqmm FR PVC insulated copper conductor single core cable etc as required	Point	15		
4		Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.	Each	290		
5		Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 nos 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.	Each	60		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
6		Supplying and fixing of following way prewired TP&N Phase Segregation (7 segment), IP42, MCB distribution board of sheet steel for 415 volts, on surface / recess, complete with loose wire box, terminal blocks, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper busbar, neutral link, earth bar, din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc, as required (But without MCB / RCCB / Isolator)				
a)		12 way Double door	Nos	14		
b)		8 way Double Door	Nos	18		
c)		6 way Double Door	Nos	20		
d)		4 way Double Door	Nos	20		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
7		Supplying and fixing of following rating, 240/415 volts, "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.				
a)		40A TPN C curve MCB	Each	10		
b)		63A TPN C curve MCB	Each	25		
c)		63A DP C curve MCB	Each	15		
d)		40A DP C curve MCB	Each	30		
8		Supply and installation of the following TPN MCCB on suitable MS box made of 14SWG CRCA sheet powder coated for housing MCCB, fixed with suitable Angle Iron Frame work with internal and earth wire connection complete with all required accessories as required.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)		315A TPN MCCB 36 KA with Thermal and Magnetic trip	No	8		
b)		250A TPN MCCB 36 KA with Micro-Processor Releases	No	2		
c)		200A TPN MCCB 36KA with Micro-Processor Releases	No	3		
d)		100A TPN MCCB 25 KA with Thermal and Magnetic trip	No	5		
e)		63A TPN MCCB 16KA with Thermal and Magnetic trip	No	7		
9		Providing and fixing earth bus of 50 mm x 6 mm G.I strip on surface for connections, etc. as required.	m	3000		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		TOTAL OF GROUP WIRING, PHASE SEG. DB & MCCB				
VII		TELEPHONE AND NET WORK SYSTEM				
1		Supply and fixing of following sizes of PVC conduit in surface or in recess including painting the conduit in case of surface or making good the wall/damages in case of recess as required.				
a)		20 mm dia	m	4000		
b)		25 mm dia	m	100		
c)		32 mm dia	m	300		
2		Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
a)		2 pair	m	3500		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
b)		4 pair	m	400		
3		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.	m	800		
4		Supplying and fixing telephone modular type socket outlet (RJ-11) in 1/2 module GI modular box with modular plate including connections etc. as required.	No	150		
5		Supplying and fixing TV modular type socket outlet in 1/2 module GI modular box with modular plate including connections etc. as required.	No	25		
6		Supplying and fixing Network modular type socket outlet (RJ-45) in 1/2 module GI modular box with modular plate including connections etc. as required.	No	180		
		TOTAL OF TELEPHONE & NETWORK SYSTEM				
VIII		LIGHT FIXTURES				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Supply of following light fixtures shall be complete with electronic ballast, lamp holder, lamp, starter, starter holder and condenser to improve power factor duly wired up for use on 240V single phase 50 Hz AC supply. All fittings should be fitted with electronic ballast of THD less than 10%				
1		2'x2', 4 x 14 W CFL, Recess type fitting with 4 Nos 14W T5 lamp all accessories complete. Philips TBS669 M 4xTL5 -14W EBP D6 / Wipro WVP 20414 SGW / Bajaj BTMRA 414 V2	Nos	530		
2		1 x 18 W CFL surface mounted CFL fitting with 1 No 18 W CFL lamp with all accessories complete. Wipro FWP 42118 or Equi.	Nos	20		
3		1x 18 W CFL Recess Mount Round CFL fitting with 1Nos 18 CFL lamps with all accessories complete Wipro WCP 28118 SGW / Philips FBH145/118HF / Bajaj BJDR 118 FR FGLN WEB	No	625		
4		2x 18 W CFL Recess Mount Round CFL fitting with 2 Nos 18 CFL lamps with all accessories complete Wipro WCP 28218 SGW / Philips FBH145/218HF / Bajaj BJDR 218 FR FGLN WEB	No	365		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5		1 x 28 W T5 Surface mounting fluorescent lumminarire CRCA sheet steel box type fitting with electronic ballast with 1No 28W T5 Lamp with all accessories complete. Philips TMS 122 /128 HF / Wipro Saviour WIF 20128 SGW / Bajaj BTIR 128	No	360		
6		2 x 28 W T5 surface Mounting fluorescent lumminarire CRCA sheet steel box type fitting with electronic ballast with 2 Nos 28W lamp with all accessories complete. Philips TMS 122/228 HF / Wipro WIF 20228 SGW / Bajaj BTIR 228	No	80		
7		1' x 1' Recess Mounting fitting 2 x 18 W CFL or 1x36W CFL complete with 2 Nos of 18W CFL Lamp or 1 no. 36W lamp & all accessories. Wipro WVP 25136 SGW / Philips FBS 300 M 2xPL-L18W IC P5 / Bajaj BMLA 01 218 CFL D W2EB	No	220		
8		1 x 9 W CFL Bulk Head fitting with 1 No 9 W CFL Lamp with all accessories complete. Wipro WKP 14109 / Philips FXC-101 / Bajaj BJB 19	No	165		
9		2 x 28 W T5 Recess Mounting fluorescent lumminarire CRCA sheet steel box type fitting with electronic ballast with 2 Nos 28W lamp with all accessories complete. Philips TBS 669 M 2xTL-5-28W EB M2 / Wipro WVF 20228 SGW / Bajaj BTMRA 228 MATT	No	25		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
10		LED Ltg, recess Type,LED downlighter with special frosted diffuser. Wipro LD46-006-XXX-WH-XX / Philips BBS180 1xDLED-5000 PSU WH / Bajaj BGSL 0 06 01 WW	No	60		
11		4x28W T5 surface mounting mid bay fluorescent luminaire in CRCA sheet box type fitting with cover, electronic ballast, 4 nos 28W lamp and all accessories complete. Philips TPS 325 EBP AC / Wipro WHF 30428 SGW / Equv.	Nos.	25		
12		1x70W MH ftg with Integrated Control gear & 70 W MH Lamp in die cast al housing with IP:65 Enclosure Wipro Type WFH 51070 / Equv.	Nos.	15		
13		Clean room light fixture 2x36W CFL recess mounted IP 54 bottom opening . Wipro WIP 43236 SGW / Philips FCS 650 2xPL-L36W EBP FOP GT / Bajaj BPRF 236 C LHD	No	40		
14		Supply of Decorative Wall fan 400 mm sweep, 230V.1Ph, complete with Openable mesh Cover ,string Operated etc as required. (Make: Crompton / Bajaj / Khaithan / Usha	No	125		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
15		Supply of ceiling fan 1200 mm sweep,230V,1Ph, complete with double ball bearing, motor blades, down rods, canopy, capacitor etc complete as required. M/s.Crompton/Bajaj/Khaithan/Usha	No	100		
16		Supply of 300 mm dia medium duty Industrial type air exhaust fan complete with louvers and cable from ceiling rose / connector to fan. M/s.Crompton/GE/Khaithan/Usha	No	180		
17		Supply of 450 mm dia Heavy Duty Industrial type air exhaust fan complete with louvers and cable from ceiling rose/connector to fan. M/s.Crompton/GE/Khaithan/Usha	Nos	10		
18		Installation, testing and commissioning of prewired, fluorescent fittings/compact fluorescent fitting/LED light fitting of all types, complete with all accessories and tube etc. in false ceiling (recess Mounted) including connections with 1.5 sq.mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	1900		
		TOTAL OF LIGHT FITTINGS				
		TOTAL AMOUNT IN RS				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
HT & LT ELECTRICAL INSTALLATION WORKS SUMMARY						
A		H.T.DISTRIBUTION PANEL				
B		BUS DUCT & RISING MAIN				
C		DG SET & SYNCHRONISING PANEL				
D		LT PANELS				
E		HT CABLES				
F		BATTERY, BATTERY CHARGER CUM DC BOARD FOR DC CONTROL				
G		EXTERNAL LIGHTING				
H		SAFETY				
I		EARTHING				
J		SOLAR LIGHTING SYSTEM				
K		LAYING & TERMINATION OF HT CABLE				
		TOTAL COST				
BOQ FOR HT & LT ELECTRICAL WORKS						
A. HT PANEL & TRANSFORMER						
1		INDOOR HT PANEL				
		Supply, installation, testing and commissioning of Indoor HT VCB 3 panel unit, floor mounted, fabricated with 2mm thick CRCA sheet suitably reinforced, powder coated, with segregated HT & LT compartment consisting of				
		Incomer				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		One no. 11 kV, 630A, TP, 500 MVA, VCB, with suitably interlocked earth switch, having horizontal draw out and isolation. The VCB shall be fitted with motorized spring mechanism for closing, ON, OFF LED /mechanical indication lamp, emergency trip, Microprocessor based Protection relays (3 OC & 1 SC), high speed tripping relay, trip circuit supervision relay, safety shutter etc. The breaker shall be complete with closing coil, tripping coil and shunt trip. Providing necessary power pack (in-built) also forms part of the scope. The panel shall be provided with the required no. of auxiliary contacts with 4NO+4NC spare contacts.				
		Outgoing				
		Two nos. 11 kV, 630A, TP, 500 MVA, VCB, having horizontal draw out and isolation. The VCB shall be fitted with motorized spring mechanism for closing with ON, OFF LED / mechanical indication lamp, emergency trip, Microprocessor based Protection relays (3 OC & 1 SC), high speed tripping relay, trip circuit supervision relay, auxillary relay for Transformer, safety shutter etc. The breaker shall be complete with closing coil, tripping coil and shunt trip. Providing necessary power pack (in-built) also forms part of the scope. The panel shall be provided with the required no. of auxiliary contacts with 4NO+4NC spare contacts.				
		Components in each incomer and outgoing panels shall also include, but not limited to the following items.				
		1 no. Trip neutral close (T-N-C) switch.				
		1 no. Analogue volt meter scaled 0-15KV with selector switch				
		1 no. Analogue ammeter scaled 0-50 A with selector switch				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		1 set On,Off, Trip, Trip healthy, spring charge indication lamp				
		1 set panel earth bus.				
		1 set Inbuilt Power pack of 110V AC input with DC output for control & indication				
		1 set Draw out type 3 limb, 11 kV/110V, 100VA, class 0.5, epoxy cast resin potential transformer with necessary HT & LT fuses.				
		1 set Epoxy resin cast CT with suitable ratio as per demand load, with 15VA, class 0.5 for metering & 15VA class 5P10 for protection				
		1 no Panel heater with a control switch and illumination lamp with door switch.				
		1 set Test terminal block.				
		1 set 800A, 26.2kA, TP copper bus having a current density of 1.2A per sqmm duly sleeved with all accessories and insulators complete as required.				
		1 set 8 window solid state alarm annunciator with test, acknowledge, reset push button with hooter.				
		Required Danger boards, signages, lettering etc.				
		The panel shall be subjected to all routine tests as per IS/IEC standards. Type test certificate of identical panel shall be submitted.				
		The VCB & panel shall be provided with all necessary standard safety feature as per IS & door interlocks such as breaker cannot be drawn out when breaker is in ON position and similarly breaker cannot be closed unless it is fully in drawn in condition.				
		In addition to the above, 11kV HT panel shall be with all requirements as per the guidelines by Local E.B authorities and Electrical inspectorate.	No	1		
2		DISTRIBUTION TRANSFORMER (DRY TYPE)				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Supply, installation, testing and commissioning of 1000 kVA, 11kV/433V, 3 phase, 50 Hz, Delta star, DYn11, Dry type, cast resin, indoor, naturally cooled, copper double wound transformer with On load tap changer from +5% to -15% in steps of $\pm 1.25\%$, remote tap changes panel with AVR, class F insulation, complete with WTI and scanner for alarm & trip, unidirectional rollers, cable end box for termination of HT cables & Bus duct for LT side complete with rating and technical name plate, earthing terminals with lugs, lifting lugs in all respect with all necessary standard accessories and as per IS. The transformer shall have suitable enclosure for providing neutral CT on earthed star point with connector for connection to REF relay provided in Main panel. All routing test as per IS shall be conducted on the transformer. The Transformer Enclosure shall have suitably designed Louvers for Air Circulation & efficient Cooling, required Danger boards, signages, lettering etc.. The enclosure shall be Epoxy Powder coated. The transformer shall be subjected to all routine tests as per IS/IEC standards. Type test certificate shall be submitted.	Set	2		
3		11kV RMU UNIT				
		Design, supply, fabrication, installation, testing & commissioning of 11 KV Outdoor 3 panel RMU as per TNEB Norms with TNEB metering. The RMU consists of 2 nos. 630A, 25kA Air break / Load break Isolator with suitability interlocked earth switch & 1 no. 630A, 25kA Vacuum circuit breaker .				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		The 3 panel RMU shall be totally enclosed, free standing, floor mounting, dust & vermin proof, outdoor cubical type, IP65, made of 14SWG sheet steel powder coated with necessary cable alley & busbar chamber. The panel shall be with PVC sleeved copper busbar for 630A with required copper strip for panel earthing & support insulators, space heater with thermostat ON/OFF switch, panel also consists of				
		The isolator Cubicle with 2 nos ON/OFF indications both electrical & mechanical and also shall be equipped with a voltage indication to indicate whether there is voltage or not on the cable. The isolator shall have facility to check the synchronisation of phase with the use of external device. The isolator shall have front operated spring assisted manual closing mechanism, mechanical interlock between incomers, operating handle, 2 NO+2NC Aux. contact etc				
		The VCB unit shall be horizontal draw out type with 230V AC motor operated spring charged mechanism with ON/OFF mechanical indicator, shunt trip and closing coil of 110 V DC (DC source of supply derived from a power pack suitable for 3 tripping and 2 closing operations), mechanical operation counter, 4 NO + 4 NC spare aux. contact mechanical type for customer use with contact multiplication contactor, automatic safety shutter, mechanical close/trip knob, anti pumping device, Power pack suitable for 230V AC - 110 V DC, operating handle etc. The VCB panel also consists of				
		i) 1 set of 11kV / Φ 3 / 110V / Φ 3. three phase 3 limb 50 VA per phase, class 0.5 resin cast potential transformer complete with HT/LT HRC fuse, draw out type with sealing arrangement.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		ii) 3 nos of Current transformer of suitable rating dual core (Core 1 - 5VA class 0.5 for metering and 15VA 5P20 for protection) as per the TNEB requirement.				
		iii) Metering : 3 nos. Ammeter, 1 no. Voltmeter with selector switch. Cut-out provision to provide Trivector meter provided by TNEB.				
		iv) Protection : 1 no. IDMT two over current and one earth fault relay with highest Instt. Element 1.3sec and 1 no. Master trip relay.				
		v) Indication lamp for breaker such as ON / OFF / Auto Trip / Spring charged / Healthy trip indication and R,Y,B phase indication lamps.				
		vi) 1 set TNC breaker control switch and push button for healthy trip.				
		Required Danger boards, signages, lettering etc.				
		The panel shall be with PVC sleeved copper busbar for 630A with required copper strip for panel earthing & support insulators, space heater with thermostat ON/OFF switch, control wiring, non-magnetic bottom entry gland plates, MCB for AC/DC control, single phase switch socket, cubical illumination lamp, door switch, fully covered test terminal block etc.				
		The panel shall have provision for sealing arrangement for metering chamber, CT and PT compartment. The RMU shall be with bottom entry for incoming & outgoing cables, all necessary accessories for connecting 11kV cable.	Each	1		
4		11kV LBS UNIT				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Design, supply, installation, testing & commissioning of 11kV, 25kA, 630A, 3 ph, 50Hz, HT Outdoor, Air break / Load break switch (LBS) panel with fuse tripping arrangement with mechanical interlocked earth switch, front operated spring assisted manual closing mechanism, 2NO+2NC aux contact, operating handle, shunt trip coil 230V AC. The panel shall be totally enclosed, free standing, floor mounting, dust & vermin proof, outdoor cubical type, IP65, made of 14SWG sheet steel powder coated with necessary cable alley & busbar chamber. The panel shall be with 630A aluminium PVC sleeved busbar & support insulators, space heater with thermostat, cubicle illumination lamp, seal off bushings, control wiring etc. The panel also consists of				
		HT HRC Fuse (rating required as per the norms of TNEB) - 3 nos.				
		Shunt trip coil 230V AC - 1 no.				
		ON/OFF / Trip indication lamp - 1 set				
		Trip push button - 1 no.				
		Plug & socket with control switch - 1 no.				
		Required Danger boards, signages, lettering etc.				
		The panel shall be with bottom entry to receive incoming & outgoing cable, with all necessary interconnection & accessories .	Each	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5		Supply, fabricating & erection of 1.8 mtr high chain link fencing (50mm cross link) over 600 mm high brick masonry, using 4 mm thick GI chain link with a framework of 50x50x6 mm MS angle between vertical posts of ISMC 75x50mm at 2400 mm interval, which are fixed to the concrete footing (1:2:4) of size 450x450x200 mm (above GL) with adequate footing depth, between the brick / block masonry. Brick / block masonry (345 mm thick) and 200 mm from ground level for foundation & plinth in cement mortar (1:6). The brick masonry is to be pointed using cement mortar 1:3 to have a flush finish. Earth strip shall be connected to the fencing for its earthing. The MS framework for chain link fencing is finished using zinc chromate primer & 2 coats of synthetic enamel paint. 1.5 mtr wide gate shall be provided with suitable locking arrangements. The rate shall be inclusive of all materials, labour, lead, lift, etc including excavation works and fabrication and assembly works including all nuts, bolts & other miscellaneous items, required Danger boards, signages, lettering etc. complete	m	25		
		TOTAL COST OF HT PANEL & TRANSFORMER				
B. BUS DUCT & RISING MAIN						

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
1		Supply, installation, testing and commissioning of following capacity sandwich, epoxy insulated, compact, indoor type (TPN) bus trunking on wall / ceiling, with high conductivity aluminium conductor in convenient sections for use on 3 phase 4 wire, 415V, 50 KA for 1 sec, AC supply. The housing shall be constructed from 1.6mm (min) thick electro galvanised sheet steel enclosure, IP54 with epoxy coated. The busduct shall be complete with 4 nos aluminium busbar, termination ends, elbow, necessary joints, flexibles, elbow joints & expansion joints, fire barriers at wall / ceiling crossing, continuous earthing with 25 x 6 mm copper strip on each side including clamping bracket, angle iron bracket, steel fasteners, connecting to earthing system, required Danger boards, signages, lettering etc. as required. The bus duct shall comply with IEC and BS standards. The routine test certificate as per IS / IEC and type test certificate of identical bus trunking shall be furnished.				
a)		2000 A 50kA SC for 1 sec.	m	60		
b)		1600 A 50kA SC for 1 sec.	m	80		
c)		1250 A 50kA SC for 1 sec.	m	180		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
2		Supply, installation, testing and commissioning of following capacity sandwich, epoxy insulated, compact, indoor type (TPN) Rising main on wall / ceiling / shaft, with high conductivity aluminium conductor in convenient sections for use on 3 phase 4 wire, 415V, 50 KA for 1 sec, AC supply. The housing shall be constructed from 1.6mm (min) thick electro galvanised sheet steel enclosure, IP54 with epoxy coated. The busduct shall be complete with 4 nos aluminium busbar, termination ends, elbow, necessary joints, flexibles, elbow joints & expansion joints, fire barriers at wall / ceiling crossing & each floor, provision of tapping at every meter, continuous earthing with 25 x 6 mm copper strip on each side including clamping bracket, angle iron bracket, steel fasteners, connecting to earthing system, required Danger boards, signages, lettering etc. as required. The bus duct shall comply with IEC and BS standards. The routine test certificate as per IS / IEC and type test certificate of identical rising main shall be furnished.				
a)		1000 A 50kA SC for 1 sec.	m	200		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
3		Supply, installing, connecting to existing sandwich rising mains, testing and commissioning of following capacity End Feed Unit for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply made with 1.6mm thick electro galvanised steel sheet enclosure, IP54, with 1000A, FP, 50kA, microprocessor based ACB with overload, instantaneous SC, delayed SC, and ground fault protection complete with necessary joints including clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system, required Danger boards, signages, lettering etc. as required. The end feed unit shall comply with IEC and BS standards. The routine test certificate as per IS / IEC and type test certificate of end feed unit shall be furnished.				
a)		1000 A 50kA SC for 1 sec.	Each	2		
4		Supply, installing, connecting to existing sandwich rising mains, testing and commissioning of following capacity Plug in / Tap off box for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply made with 1.6mm thick electro galvanised steel sheet enclosure, IP54, with Feeder rating, FP, 35kA, thermal magnetic, MCCB with overload, SC, and earth fault protection complete with necessary joints including clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system, required Danger boards, signages, lettering etc. as required. The plug in / tap off unit shall comply with IEC and BS standards. The routine test certificate as per IS / IEC and type test certificate of plug in / tap off unit shall be furnished.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)		250 A 35kA SC	Each	5		
b)		200 A 35kA SC	Each	5		
c)		125 A 16kA SC	Each	10		
		TOTAL COST OF BUS DUCT & RISING MAIN				
C. DG SET & SYNCHRONISING PANEL						
1		Supply, Installation, Testing and Commissioning of 750 KVA, silent type, water cooled, radiator type, four stroke, electric start D.G Set with acoustic enclosure and standard control panel. The engine shall be capable of taking 10% overload for one hour after 12 hours of continuous operation. The DG shall be suitable for AMF operation. The alternator shall be brushless, self excited, self regulated, brushless, SPD enclosure, class F/H insulation, suitable for continuous operation at 1500 rpm, generating 415 V +/- 5% at 0.8 p.f, 50Hz, 0.85 load factor, 3 phase, 4 wire system generally conforming to BS: 2613 & IS: 4722.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		The control panel shall be provided with all engine protection equipments, indications etc The DG set shall be suitable for synchronising with 4 nos DG set and include all necessary control cabling from DG set to synchronising panel and Main LT panel for AMF, synchronising & load sharing operation. The item also include supply and installation of diesel 990 ltr day tank with all necessary fuel piping, fittings etc from the day tank to engine for each DG set including necessary trenching.				
		Both Engine and Alternator shall be mounted on common channel iron base frame, and with standard accessories such as antivibration pad, lead acid batteries (as specified by engine manufacturer) and engine driven battery charger along with leads, battery stand, fuel piping from fuel tank to Engine, electronic governor, Residential silencer, suitable size cable termination box, required Danger boards, signages, lettering etc as required. Rate shall be inclusive of all lift, lead charges. The work should be as per Electrical Inspectorate / Pollution control board norms.	Nos	2		
2		Supply & installation of exhaust gas piping of suitable diameter as per manufactures standard welded black MS, B class pipe confirming to IS:3589 cut to required lengths and installed with necessary bends, supports and clamps, anti- vibration mountings, insulation of exhaust system with mineral wool / Rockwool, 50mm thick wire mesh & aluminum cladding etc.	m	100		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
3		Supply and installing of DG set stack using angular structure, channel, necessary nut and bolt and all required accessories for erecting exhaust pipe from 2 nos DG set and space provision for providing exhaust pipe for 2 more DG set in future. The design of the stack with foundation shall be got approved before fabrication. The foundation for the stack shall be measured separately.	Kg	2000		
4		Supply, Installation, Testing & Commissioning of DG set AMF Synchronising and Load sharing panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system with busbars extendable on both sides, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification. The panel shall be suitable for receiving 1250A Bus duct to the incomer ACB.				
		Incomer				
		1250A, FP, 50kA, microprocessor based ACB electrical drawout type, motorised, with overload, instantaneous SC, delayed SC, and ground fault protection - 2 nos.				
		2 nos - 630A, FP, AC3 duty power contactor for neutral earthing.				
		Suitable electrical and mechanical interlock shall be provided between the incomer & bus coupler if required.				
		Bus Coupler				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		2000A, FP, 50kA, microprocessor based ACB electrical drawout type, motorised, with out protection - 1 no.				
		Busbar				
		1 Set of 2500 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 2 set				
		RYB indication lamp, LED type - 2 set				
		On/Off, Trip indication lamp, LED type - 2 set				
		(0-500)V voltmeter, Acc. class 1 with 90 deg defl. scale - 2 set				
		(0-2000)A ammeter Acc. class 1 with 240 deg defl. Scale - 2 set				
		2 set 3 phase Digital Multi function meter to read V, A, F, kW, PF, kWh, Acc class 1 and with RS 232 communication port.				
		Low set earth fault relay using CT of 200/5A 15VA Cl. 5P10 with necessary control cable from CT at DG neutral to REF relay in synchronising panel - 2 set				
		1250/5A 15VA class 0.5 resin cast CT for metering - 2 set				
		1250/5A 15VA class 5P10 resin cast CT for protection - 2 set				
		1250/5A 15VA class PS resin cast CT for differential protection - 2 set				
		Required Danger boards, signages, lettering etc.				
		Microprocessor based AMF logic with EB sensing, protection for under / over voltage, reverse power, under / over frequency, unbalance, programmable start/stop timings, DG battery supervision integral push button for DG stat/stop, DG breaker close/open, Auto/Manual/Off and Annunciator accept / reset. Programmable mains restoration, re-cooling timings, Micro-processor based Protection relays, 16 window LCD Annunciator for DG faults.shall be provided.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Integrated microprocessor based Auto Synchronizer with auto load sharing relay with outputs for voltage increase/decrease, Frequency increase / decrease, and programmable breaker closing time with load sharing relay shall be provided. Necessary LVMS and required control accessories shall be provided for sensing from both the EB incoming supply for the auto start of DG set.				
		Outgoing.				
		2000A, FP, 50kA, microprocessor based ACB electrical drawout type with overload, instantaneous SC, delayed SC, and ground fault protection - 2 nos.				
		The panel shall be suitable for further extension on both sides. Space provision shall be provided for one no. incoming breaker for DG with bus coupler along with its indication and metering accessories.	Each	1		
		TOTAL COST FOR DG SET & SYNCHRONISING PANEL				
D. LT PANELS						

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
1		Supply, Installation, Testing & Commissioning of Main panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system with busbars extendable on both sides, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification. The panel shall be suitable for receiving 2500A Bus duct to the incomer ACB.				
		Incomer				
		2000A, FP, 50kA, microprocessor based ACB electrical drawout type, motorised, with overload, instantaneous SC, delayed SC, and ground fault protection - 2 nos.				
		1600A, FP, 50kA, microprocessor based ACB electrical drawout type, motorised, with overload, instantaneous SC, delayed SC, and ground fault protection - 2 nos.				
		Suitable electrical and mechanical interlock shall be provided between the DG and EB incomer.				
		Bus Coupler				
		2000A, FP, 50kA, microprocessor based ACB electrical drawout type, motorised with out protection - 1 no.				
		Busbar				
		1 Set of 2500 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 4 set				
		RYB indication lamp, LED type - 4 set				
		On/Off, Trip indication lamp, LED type - 4 set				
		(0-500)V voltmeter, Acc. class 1 with 90 deg defl. scale - 4 set				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		(0-2000)A ammeter Acc. class 1 with 240 deg defl. Scale - 2 set				
		(0-1600)A ammeter Acc. class 1 with 240 deg defl. Scale - 2 set				
		4 set 3 phase Digital Multi function meter to read V, A, F, kW, PF, kWh, Acc class 1 and with RS 232 communication port.				
		Low set earth fault relay using CT of 300/5A 15VA Cl. 5P10 with necessary control cable from CT at transformer neutral to REF relay in MSB panel- 2 set				
		2000/5A 15VA class 1 resin cast CT - 2 set				
		1600/5A 15VA class 1 resin cast CT - 2 set				
		1600/5A 15VA class 1 resin cast CT for connection to APFC panel - 2 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		1250A, FP, 50kA, microprocessor based ACB electrical drawout type with overload, instantaneous SC, delayed SC, and ground fault protection - 2 nos.				
		1000A, FP, 50kA, microprocessor based ACB electrical drawout type with overload, instantaneous SC, delayed SC, and ground fault protection - 2 nos.				
		630A TPN 50kA MCCB with microprocessor release with adjustable OL, SC and EF protection - 8 nos.				
		400A TP+NL 50kA MCCB with microprocessor release with adjustable OL, SC and EF protection - 6 nos.				
		250A TP+NL 35kA MCCB with microprocessor release with adjustable OL, SC and EF protection - 6 nos.				
		13 Nos 3 phase Digital Multi function meter to read V, A, F Acc class 1.				
		The panel shall be suitable for further extension on both sides. Space provision shall be provided for one no. incoming breaker for DG with bus coupler along with its indication and metering accessories.	Each	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
2		Supply, Installation, Testing & Commissioning of 250kVAR APFC panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system with busbars extendable on both sides, including internal wiring with suitable size wires, rotary handle, spreaders etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		1 No 630A, FP, 35kA, MCCB with Thermal Magnetic release, having adjustable OL & SC protection.				
		Busbar				
		1 Set of 800 Amp TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		1 No 3 phase Digital Multi function meter to read V, A, F with Acc class 1.				
		1 Set of phase indicating lamps, LED type, RYB.				
		1 Set of 2A 10kA C curve SP control MCB				
		1 Set of 630/5A, Class 1.0, 5VA, Cast Resin CT for metering				
		1 no. 8 stage APFC relay				
		8 set On, Off push button				
		8 set On, Off LED type indication lamp				
		1 set Auto / manual selector switch.				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		3 Nos 100A, TPN, 16kA, MCCB with Thermal Magnetic release, having adjustable OL & SC protection.				
		5 Nos. 63A, TPN, D curve, MCB				
		2 Nos. 12.5kVAR MPP heavy duty capacitor with capacitor duty contactor & 7% detuned harmonic filter.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		3 Nos. 25kVAR MPP heavy duty capacitor with capacitor duty contactor & 7% detuned harmonic filter.				
		2 Nos. 50kVAR MPP heavy duty capacitor with capacitor duty contactor & 7% detuned harmonic filter.				
		1 No. 50kVAR MPP heavy duty capacitor with 7% detuned harmonic filter directly connected.	Each	2		
3		Supply, Installation, Testing & Commissioning of HVAC Chiller panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP54, free standing, floor mounting, dust and vermin proof, powder coated, outdoor type, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		1250A, FP, 50kA, microprocessor based ACB with overload, instantaneous SC, delayed SC, and ground fault protection complete - 2 nos				
		1250A, FP, 50kA, ACB with as buscoupler with suitable mechanical, electrical interlock. - 1 no.				
		Busbar				
		1 Set of 1300 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 6 nos.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		RYB indication lamp, LED type - 6 nos.				
		2 Nos 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		1250/5A 15VA class 1 resin cast CT - 2 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		400A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 4 nos.				
		2 nos space provision shall be provided for providing 400A TPN MCCB with all required accessories.	Each	1		
4		Supply, Installation, Testing & Commissioning of HVAC pump panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP54, free standing, floor mounting, dust and vermin proof, powder coated, outdoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		400A, TPN, switch disconnecter unit (Isolator), AC23, 415V, 50Hz, complete with handle assembly having door interlock - 2 nos.				
		400A, TPN, switch disconnecter unit (Isolator), AC23, 415V, 50Hz, as bus coupler with suitable mechanical interlock - 1 no.				
		Busbar				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		1 Set of 400 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 6 nos.				
		RYB indication lamp, LED type - 6 nos.				
		2 Nos 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		400/5A 5VA class 1 resin cast CT - 2 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		63A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 12 nos.				
		40A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 6 nos.				
		9 nos Suitable rating DOL / star delta starters shall be provided for the chilled water primary pump (approx. 10 kW), condensate water pump (approx. 20kW), cooling tower (approx 15kW) with indication lamp, push button, contactor, OLR, SSP etc and all required accessories.				
		6 nos space provision shall be provided for providing DOL / star delts stater for the spare feeders with all required accessories.				
		6 nos space provision shall be provided for providing VFD / stater for the spare feeders with all required accessories.	Each	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5		Supply, Installation, Testing & Commissioning of Radiology panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		630A, TPN, MCCB, thermal magnetic with adjustable OL, SC, setting 415V, 50Hz, complete with handle assembly having door interlock - 1 no.				
		Busbar				
		1 Set of 650 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 3 nos.				
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		630/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		250A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 2 nos.				
		160A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 2 nos.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		125A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 6 nos.	Each	1		
6		Supply, Installation, Testing & Commissioning of Utility panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		630A, TPN, switch disconnecter unit (Isolator), AC23, 415V, 50Hz, complete with handle assembly having door interlock - 1 no.				
		Busbar				
		1 Set of 650 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 3 nos.				
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		600/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		250A TPN MCCB, thermal magnetic with adjustable OL, SC setting - 4 nos.				
		160A TPN MCCB, thermal magnetic with adjustable OL, SC setting - 4 nos.				
		125A TPN MCCB, thermal magnetic with adjustable OL, SC setting - 4 nos.	Each	2		
7		Supply, Installation, Testing & Commissioning of Main UPS panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		250A, TPN, MCCB, microprocessor based having adjustable O/L, SC protection - 2 nos.				
		Busbar				
		1 Set of 300 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 2 set				
		RYB indication lamp, LED type - 2 set				
		2 Nos 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		250/5A 10VA class 1 resin cast CT - 2 set				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		125A, TPN, MCCB, thermal magnetic having adjustable O/L, SC protection - 6 nos.				
		160A, TPN, MCCB, thermal magnetic having adjustable O/L, SC protection - 2 nos.	Each	1		
8		Supply, Installation, Testing & Commissioning of Sub panel-1, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		250A, FP, On-load changeover switch with extended rotory handle - 1 no.				
		250A, TPN, MCCB, microprocessor based having adjustable O/L, SC protection - 1 no.				
		Busbar				
		1 Set of 300 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 3 nos.				
		RYB indication lamp, LED type - 3 nos.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		250/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		100A TPN MCCB, thermal magnetic - 4 nos.				
		63A TPN C curve MCB - 6 nos.	Each	5		
9		Supply, Installation, Testing & Commissioning of Sub panel-2, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		200A, FP, On-load changeover switch with extended rotory handle - 1 no.				
		200A, TPN, MCCB, microprocessor based having adjustable O/L, SC protection - 1 no.				
		Busbar				
		1 Set of 250 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		2A, C curve SP MCB - 3 nos.				
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		200/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		100A TPN MCCB, thermal magnetic - 4 nos.				
		63A TPN C curve MCB - 6 nos.	Each	5		
10		Supply, Installation, Testing & Commissioning of Sub panel-3, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		125A, FP, On-load changeover switch with extended rotory handle - 1 no.				
		125A, TPN, MCCB, microprocessor based having adjustable O/L, SC protection - 1 no.				
		Busbar				
		1 Set of 150 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Instruments				
		2A, C curve SP MCB - 3 nos.				
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		125/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		40A TPN C curve MCB - 10 nos.				
		25A TPN C curve MCB - 6 nos.	Each	5		
11		Supply, Installation, Testing & Commissioning of Sub panel-4, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		125A, TPN, MCCB, microprocessor based having adjustable O/L, SC protection - 1 no.				
		Busbar				
		1 Set of 150 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		2A, C curve SP MCB - 3 nos.				
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		125/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		63A TPN C curve MCB - 6 nos.				
		40A TPN C curve MCB - 4 nos.	Each	5		
12		Supply, Installation, Testing & Commissioning of Sub panel-5, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		160A, TPN, MCCB, microprocessor based having adjustable O/L, SC protection - 1 no.				
		Busbar				
		1 Set of 200 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 3 nos.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		160/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		100A TPN MCCB, thermal magnetic - 4 nos.				
		63A TPN C curve MCB - 6 nos.	Each	2		
13		Supply, Installation, Testing & Commissioning of Plumbing panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		250A, TPN, MCCB, microprocessor based having adjustable O/L, SC protection - 1 no.				
		Busbar				
		1 Set of 250 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 3 nos.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		200/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		100A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 2 nos.				
		63A TPN C curve MCB - 6 nos.				
		4 nos Suitable DOL / star delta starters shall be provided for the pump motor with indication lamp, push button, contactor, OLR, SSP etc.				
		2 set level sensor and auxillary relay for auto start / stop of pumps shall be provided.	Each	1		
14		Supply, Installation, Testing & Commissioning of Main Lift panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				
		250A, TPN, MCCB, microprocessor based having adjustable O/L, SC protection - 1 no.				
		Busbar				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		1 Set of 300 A TPN busbars of high conductivity electrolytic quality Aluminium alloy and suitable size earthing conductor through out the panel for its earthing.				
		Instruments				
		2A, C curve SP MCB - 3 nos.				
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F, kW, kWh, Acc class 1.				
		250/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		63A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 8 nos.				
		40A TPN MCCB, thermal magnetic with adjustable OL, SC protection - 6 nos.	Each	1		
15		Installation, Testing & Commissioning of LT panel (1.5m W x 1.765m H x 0.4mm D) (Incomer 250A FP MCCB, Outgoing 1no. 100A SDF, 5 nos 63A SDF), cubicle type, free standing, floor mounting, dust and vermin proof, powder coated, indoor, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system. The panel will be supplied by client / HLL at Rajaji Hospital. The contractor shall transport the panel from place of storage to the required place of installation. Any minor rectification (like replacement of switchgear handle, control wiring, HRC fuse etc) for the proper functioning of the panel shall be included in the scope of work.	Each	6		
		TOTAL COST OF LT PANELS				
E. HT CABLES						

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
1		Supply of following 11kV (E) grade XLPE insulated PVC sheathed compact circular armoured aluminium conductor HT power cable, insulation screened with extruded semi conducting compound in combination with copper tape suitable for 11kV earthed system confirming to relevant standard.				
a)		3C x 300 sq.mm	m	250		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
b)		3C x 240 sq.mm	m	50		
		TOTAL COST OF HT CABLES				
F. BATTERY, BATTERY CHARGER CUM DC BOARD FOR DC CONTROL						
1		Supply, installation, testing and commissioning of 24V, 120 AH rating heavy duty, Valve Regulated maintenance free Tubular Battery unit suitable for boost/trickle charging including Suitable floor Mounted Battery Racks, Interconnections, Batteries duly charged and complete with all accessories, etc. The Rack shall be painted with Anti-Acid Resistant paint. Preferred make: EXIDE / AMAR RAJA	Set	1		
2		Supply,Erection,Testing & Commissioning of Battery Charger Unit for above Battery with provisions of Auto-Manual selector for "Boost Charging", Float Charging" suitable for 240+/- 10%V,1Ph Supply complete with D.C. Distribution Board. The Housing for above shall be of Indoor Type, fabricated with 2mm thick CRCA sheet ,Floor Mounting cabinet with louvers, The Unit shall be complete with Adjustable Taps for Transformer for adjusting Booster current,Silcon Type Full wave Rectifier, DCMCBS,Protections & Diagnostics, Solid state Alarm Annunciator,Indicating lamps, required Danger boards, signages, lettering etc. (Preferred Make:- AE / SABNIFE / AMAR RAJA)				
		The DC DB shall be part of Charger Panel				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		1 set of 16A, DP MCB (DC)				
		Outgoing				
		4 nos. 6A, DP MCBs, incoming and outgoing terminals.				
		1 set of indicating lamps and DC voltmeter	Set	1		
		TOTAL COST OF BATTERY, BATTERY CHARGER				
G. EXTERNAL LIGHTING						
1		Supply & installation of Hot dipped Galvanised (internally and externally), seamless, octogonal pole of overall length 8 M with single arm bracket of 1.5m length 48mm dia x 3.25mm thick with standard arm cap. The pole shall have inbuilt cable loop in loop out with flush door and locking facility. The bottom dia of the pole shall be 135mm and top 70mm with 3mm sheet thickness. The pole shall be with base plate of 225x225x16mm and 4nos required size of foundation bolt. The pole shall be mounted on suitable size foundation (design to be got approved) with baseplate arrangement and provided with 4A SP C curve MCB, loop in loop out terminals block, required dia GI / PVC pipe shall be provided in the foundation for taking cable in & out from the pole, 3C x 1.5sqmm unarmoured PVC insulated round copper cable from loop in loop out to light fixture etc with all required accessories. The cost of the civil foundation is not considered in this item.	Each	30		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
2		Supply & installation of Hot dipped Galvanised (internally and externally), seamless, octogonal pole of overall length 8 M with double arm bracket of 1.5m length 48mm dia x 3.25mm thick with standard arm cap. The pole shall have inbuilt cable loop in loop out with flush door and locking facility. The bottom dia of the pole shall be 135mm and top 70mm with 3mm sheet thickness. The pole shall be with base plate of 225x225x16mm and 4nos required size of foundation bolt. The pole shall be mounted on suitable size foundation (design to be got approved) with baseplate arrangement and provided with 4A SP C curve MCB, loop in loop out terminals block, required dia GI / PVC pipe shall be provided in the foundation for taking cable in & out from the pole, 3Cx1.5sqmm unarmoured PVC insulated round copper cable from loop in loop out to light fixture etc with all required accessories. The cost of the civil foundation is not considered in this item.	Each	10		
3		Supply & installation of integral, IP65, Post top luminaire with diecast aluminium powder coated housing, UV stabilized polyethylene bowl suitable for 1x70W MH lamp. The light fitting shall be mounted on 3mtr length pole, pole base, with all necessary accessories including 70W MH lamp. The cost of the civil foundation shall be measured along with civil items (Philips HPS360 1xMHNTD70W GR (antique silver) or equivalent)	Each	15		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
4		Supply & installation of IP65, bollard luminaire with diecast aluminium powder coated housing, UV stabilized polyethylene bowl suitable for 1x18W CFL lamp including all necessary accessories. The item includes 18W CFL lamp. The cost of the civil foundation shall be measured along with civil items.(Philips HCS360 1xPLC/2P18W GR (antique silver) or equivalent)	Each	15		
5		Supply, installation, testing & commissioning of IP66,150W HPSV street lighting, with die cast aluminium housing, anodised aluminum reflector, toughened glass, stainless steel toggle, heavy duty copper ballast, pf capacitor, 1x150W HPSV lamp etc as required. The light fitting shall be suitably installed with all required accessories to poles. The item shall include 3C x 1.5 sqmm PVC insulated copper unarmoured cable for connecting between the luminaire and the loop in loop out box. (Similar to Wipro WST 71150 or equivalent).	Nos	50		
6		Supply, Installation, Testing & Commissioning of Street lighting panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, free standing, floor mounting, dust and vermin proof, powder coated, outdoor type, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
		Incomer				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		63A, TPN, switch disconnecter unit (Isolator), AC23, 415V, 50Hz, complete with handle assembly having door interlock - 1 no.				
		Busbar				
		1 Set of 100 A TPN busbars of high conductivity electrolytic quality Aluminium alloy.				
		Instruments				
		2A, C curve SP MCB - 3 nos.				
		RYB indication lamp, LED type - 3 nos.				
		1 No 3 phase Digital Multi function meter to read V, A, F Acc class 1.				
		60/5A 5VA class 1 resin cast CT - 1 set				
		Required Danger boards, signages, lettering etc.				
		Outgoing.				
		25A TP+NL C curve MCB - 6 nos.				
		32A AC1 duty 4P Power contactor - 6 nos.				
		24Hr Timer with all accessories - 3 nos.	Each	1		
		TOTAL COST OF EXTERNAL LIGHTING				
H. SAFETY						
1		Supply and fixing anodised aluminum glass framed shock treatment chart.	Each	6		
2		Supply & laying ISI marked following electrical grade chequered type rubber mat.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)		2m x 1m x 6 mm for 415V grade	Nos	60		
b)		2m x 1m x 12 mm for 11kV grade	Nos	20		
3		Supply, fabrication and fixing 3 nos MS Fire buckets on suitable fabricated MS angle iron stand with hook, painting with red paint & filled with dry sand as required with all required accessories.	Set	5		
4		Supply and providing 15" long rubber hand gloves 15kV.	Pair	2		
		TOTAL COST OF SAFETY				
I. EARTHING						
1		Supplying and laying 60 mm X 6 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	m	90		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
2		Providing and fixing 60 mm X 6 mm copper strip on surface or in recess for connections etc. as required.	m	40		
3		Supplying and laying 40 mm X 6 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	m	90		
4		Providing and fixing 40 mm X 6 mm copper strip on surface or in recess for connections etc. as required.	m	40		
		TOTAL COST OF EARTHING				
J. SOLAR LIGHTING SYSTEM						

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
1		Supply, installation, testing and commissioning of 8 kWp solar power generating system with required nos. monocrystalline silicon PV modules, power conditioning system, charge control unit, Tubular VRLA battery for 2 hr backup with battery rack, 10kVA 3 phase Inverter, 3 phase 8 way Vertical DB. The item shall include all the mounting accessories for the PV module, necessary control cabling to the power conditioning unit, inverter, battery bank, VDB etc. as required. The work shall be done only by MNRE accredited channel partners for the off-grid and de-centralised solar application. The subsidy allocated by the government for the solar system shall be availed to the client. All the materials used shall be approved makes from MNRE and the material guarantee as per the guidelines of MNRE shall be passed to the client.	Job	1		
		TOTAL COST OF SOLAR LIGHTING SYSTEM				
K. LAYING & TERMINATION OF HT CABLE						
1		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.				
a)		Above 120 sq. mm and upto 400 sq. mm	m	225		
2		Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a)		Above 120 sq. mm and upto 400 sq. mm	m	25		
3		Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size in the existing masonry open duct as required.				
a)		Above 120 sq. mm and upto 400 sq. mm	m	50		
4		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 :				
a)		240 sq. mm	Each	4		
b)		300 sq. mm	Each	6		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5		Supplying and making outdoor 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 :				
a)		300 sq. mm	Each	2		
		TOTAL COST OF LAYING & TERM. OF HT CABLE				
		TOTAL AMOUNT IN RS				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
HEATING VENTILATION AND AIR CONDITIONING WORKS						
1		Supply of High Efficiency Water cooled screw type water chilling packages of 200 TR capacity each, at the duty conditions of 12°C to 7°C chilled water and 32.2 °C to 36.4°C condenser water temperatures, complete as per specifications; including necessary control cabling with emergency stop push button etc as per statutory requirement; including customs and other duties at full rate; all local taxes, levies etc. that are applicable; port clearance, warehouse charges, handling, transportation to site; rigging, installation, testing, commissioning and handing over	Nos.	2		
2		Supply, installation, testing and commissioning of Induced draft FRP construction cooling tower of 225 TR capacity at 28.2° C WB complete as per specifications. including necessary control cabling with emergency stop push button etc as per statutory requirement. Heat rejection capacity 750,000 kJals per hour.	Nos.	2		
3		Supply, installation, testing and commissioning of condenser water pump of capacity 46 Lps at 24 Mts. w.c. total head complete as per specifications. including necessary control cabling with emergency stop push button etc as per statutory requirement. (2 working, 1 standby).	Nos.	3		
4		Supply, installation, testing and commissioning of primary chilled water pump of capacity 32 Lps at 12 Mts. w.c. total head complete as per specifications including necessary control cabling with emergency stop push button etc as per statutory requirement. (2 working, 1 standby).	Nos.	3		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5		Supply, installation, testing and commissioning of secondary chilled water pump of capacity 32 Lps at 28 Mts. w.c. total head complete as per specifications including necessary control cabling with emergency stop push button etc as per statutory requirement. (2 working, 1 standby).	Nos.	3		
6		Supply, installation, testing and commissioning of Variable Frequency Drive arrangement for the secondary pump motors in suitable 14SWG CRCA enclosure consisting of adjustable frequency drive (AFD) and Pressure sensors / transmitters for each pump complete as per specifications. The pumps and VFD must be compatible.	Sets	3		
7		Supply, installation, testing and commissioning of Floor Mounted / Ceiling Suspended double skin type Chilled Water Air Handling Units (AHUs) with 40 mm thick PUF insulation with 0.6mm thick pre coated GI panels. Forward curved centrifugal blowers of Kruger or Nicotra make. The cooling coil shall be of aluminium fins and seamless copper tubes and shall be 6-rows deep. The drive motor shall be of TEFC construction with suitable rated electrical panel, On/off starter, cabling between panel and AHU, corded remote etc. The drain pan shall be of stainless steel sheet inclusive of required drain pipe etc . Pre-filters of HDPE non woven fabric with an efficiency of 90% down to particle size of 20 microns particle size shall be provided. The AHU shall be complete as per specifications and their capacities shall be:				

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
7.1		5 TR / 2000 CFM	No.	1		
7.2		8 TR / 3200 CFM	No.	1		
7.3		10 TR / 4000 CFM	Nos.	2		
7.4		12 TR / 5000 CFM	No.	1		
7.5		15 TR / 6500 CFM	No.	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
8		Supply, installation, testing and commissioning of chilled water Air Handling Units similar to that specified under Item 7.0 above, but additionally fitted with Fine filters of 99% efficiency down to 5 microns particle size, complete as per the specifications. Capacities of the AHUs:				
8.1		6 TR / 2400 CFM	No.	1		
8.2		8 TR / 3200 CFM	No.	1		
8.3		10 TR/ 4000 CFM	Nos.	2		
8.4		20 TR/ 8000 CFM	No.	1		
8.5		27 TR / 11000 CFM	Nos.	2		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
8.6		30 TR / 12000 CFM	No.	1		
9		Supply, installation, testing and commissioning of chilled water Air Handling Units similar to that specified under Item 7.0 above, but additionally fitted with Fine filters of 99% efficiency down to 5 microns particle size and backward curved centrifugal blowers to cater to the pressure drop of the HEPA filter modules, as per the specifications. Capacities of the AHUs:				
9.1		16 TR/ 4000 CFM	Nos.	6		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
10		Supply, installation, testing and commissioning of Heat Recovery Ventilator (HRV) as per specifications. The HRV shall be of double skin construction and fitted with centrifugal blowers, drive motors similar to the AHUs specified under 7.0, but with no Cooling Coil. Each HRV shall be provided with Two centrifugal blowers of the same capacity, each with it's drive motor and drive arrangement. The casing shall be partitioned horizontally to form two separate air flow systems, one for exhausting the room air to the outside and the other for supplying fresh air into the AHU room. A Heat Recovery Wheel shall be provided in the centre of the casing. This HRW shall be capable of transferring a minimum of 85% of both Sensible and Latent Heat, between the two opposing air streams. The suitable rated TEFC motor with suitable rated electrical panel, On/off starter, cabling between panel and AHU and belt drive arrangement. The HRV capacities are:				
10.1		4000 CFM Fresh air	Nos.	6		
11		Supply, installation, testing and commissioning of chilled water Fan Coil Units, complete with one ball valve with strainer at the inlet, one ball valve and 2-way motorised valve at the outlet, copper tubes and fittings, thermostat and three speed switch, canvas connection, corded remote, necessary cabling from power plug provided 3m from unit and mounting arrangement complete as per specifications. Capacities of the FCUs:				

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
11.1		1 TR/ 400 CFM	Nos.	22		
11.2		1.5 TR/ 600 CFM	Nos.	67		
11.3		2 TR / 800 CFM	Nos.	51		
11.4		2.5 TR / 1000 CFM	Nos.	9		
11.5		3 TR / 1200 CFM	Nos.	4		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
12		Supply, installation, testing and commissioning of rectangular air ducts fabricated out of GI sheets of the following sheet thickness. The ducts must be machine fabricated and must be air-tight and have a neat finish. The ducting shall be complete with fasteners and gaskets at all joints. The ducts shall be supported from the ceiling with anchor fasteners, threaded rods of GI and support angles. The ducting shall conform to IS:655 and it's latest amendments. Please see the relevant item under Technical Specifications.				
12.1		24 swg	Sq mt.	750		
12.2		22 swg	Sq mt.	600		
12.3		20 swg	Sq mt.	210		
12.4		18 swg	Sq mt.	10		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
13		Supply, installation, testing and commissioning of rectangular air ducts fabricated out of Aluminium sheets of the following sheet thickness. The ducts must be machine fabricated and must be air-tight and have a neat finish. The ducting shall be complete with fasteners and gaskets at all joints. The ducts shall be supported from the ceiling with anchor fasteners, threaded rods of GI and support angles. The ducting shall conform to IS:655 and it's latest amendments. Please see the relevant item under Technical Specifications.				
13.1		22 swg	Sq mt.	570		
13.2		20 swg	Sq mt.	10		
14		Supply, installation, testing and commissioning of spiral wound circular ducting of 24 swg thick GI sheet, as per ISS 655, factory made, complete with necessary fittings like reducers, bends, take-off collars, grill collars, dummy ends etc. and suitable anchor fasteners, GI threaded rods, fasteners etc. for installation. For ducting in areas where there is no false ceiling.	Sq mt.	150		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
15		Supply, installation, testing and commissioning of circular flexible aluminium duct connections with end clamps from main supply air ducts to the HEPA filter modules. The ducts shall be supported from the ceiling with anchor fasteners, threaded rods and clamps of GI. The ducting shall conform to IS:655 and it's latest amendments. Please see the relevant item under Technical Specifications.	Sq.mt.	60		
16		Supply, installation, testing and commissioning of thermal insulation for ducts out of nitrile rubber sheet covered with aluminium foil as per the Technical Specifications				
16.1		12 mm thick insulation	Sq mt.	1400		
16.2		25 mm thick insulation	Sq mt.	650		
17		Supply, installation, testing and commissioning of thermal insulation for ducts out of TF grade EPS slabs and covered with aluminium foil. Insulation thickness as per the Technical Specifications				
17.1		25 mm thick slabs	Sq mt.	10		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
17.2		50 mm thick slabs	Sq mt.	10		
18		Supply, installation, testing and commissioning of acoustic lining of initial portion of supply air ducts with fibreglass rigidboard grade 300/12 mm thick covered with RP tissue and perforated aluminium sheet as per the Technical Specifications	Sq mt.	250		
19		Supply, installation, testing and commissioning of supply air grills / diffusers of extruded aluminium with powder coated finish and fitted with VCDs of MS sheet as per the Technical Specifications.	Sq mt.	45		
20		Supply, installation, testing and commissioning of return air grills/diffusers out of extruded aluminium with powder coated finish as per the Technical Specifications.	Sq mt.	60		
21		Supply, installation, testing and commissioning of fire dampers of GI with fusible link as per the Technical Specifications	Sq mt.	6		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
22		Supply, installation, testing and commissioning of volume control dampers of GI sheet as per the Technical Specifications	Sq mt.	4		
23		Supply, installation, testing and commissioning of fresh air intake with damper, cowl and wire netting as per the Technical Specifications	Sq mt.	2		
24		Supply, installation, testing and commissioning of chilled water piping complete with MS 'C' class pipes and fittings and pipe supports and insulated with 50 mm thick eps moulded pipe sections, polythene sheet, wire netting and cement plastering as per the Technical Specifications. Pipe sizes:				
24.1		20 mm NB	Rmt.	470		
24.2		25 mm NB	Rmt.	240		
24.3		32 mm NB	Rmt.	250		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
24.4		40 mm NB	Rmt.	246		
24.5		50 mm NB	Rmt.	860		
24.6		65 mm NB	Rmt.	370		
24.7		80 mm NB	Rmt.	475		
24.8		100 mm NB	Rmt.	192		
24.9		125 mm NB	Rmt.	60		
24.1		150 mm NB	Rmt.	136		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
24.11		200 mm NB	Rmt.	140		
25		Supply, installation, testing and commissioning of Chilled water valves insulated with 50 mm thick eps slabs, polythene sheet and cement plastering as per the Technical Specifications				
25.1		20 mm Ball valve	Nos.	1		
25.2		25 mm Ball valve	Nos.	1		
25.3		32 mm Ball valve	Nos.	2		
25.4		40 mm Ball valve	Nos.	6		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
25.5		50 mm Butterfly valve	Nos.	24		
25.6		65 mm Butterfly valve	Nos.	1		
25.7		80 mm Butterfly valve	Nos.	10		
25.8		100 mm Butterfly valve	Nos.	4		
25.9		125 mm Butterfly valve	Nos.	1		
25.10		150 mm Butterfly valve	Nos.	18		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
25.11		200 mm Butterfly valve	Nos.	1		
26		Supply, installation, testing and commissioning of 2-way motorised valves with actuator, step down transformer, if required and thermostat for the chilled water AHUs. Valve size:				
26.1		25 mm	Set	1		
26.2		32 mm	Set	1		
26.3		40 mm	Set	3		
26.4		50 mm	Sets	12		
26.5		65 mm	Set	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
26.6		80 mm	Set	3		
27		Supply, installation, testing and commissioning of Dual plate type non-return valve with flanges and 50 mm thick insulation as per the Technical Specifications.				
27.1		150 mm	Nos.	6		
28		Supply, installation, testing and commissioning of Y- type strainers with fittings and 50 mm thick insulation as per the Technical Specifications . Size:				
28.1		25 mm	Nos.	1		
28.2		32 mm	Nos.	1		
28.3		40 mm	Nos.	3		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
28.4		50 mm	Nos.	12		
28.5		65 mm	No.	1		
28.6		80 mm	No.	3		
28.7		150 mm	Nos.	3		
29		Supply, installation, testing and commissioning of Balancing valves with 50 mm thick insulation as per the Technical Specifications. Size:				
29.1		25 mm	Nos.	1		

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
29.2		32 mm	Nos.	1		
29.3		40 mm	Nos.	3		
29.4		50 mm	Nos.	12		
29.5		65 mm	No.	1		
29.6		80 mm	No.	3		
29.7		150 mm	Nos.	3		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
30		Supply, installation, testing and commissioning of Gravity Flow type Expansion tank of 1000 litres capacity of HDPE construction with float valve, quick fill, inlet, outlet, drain and overflow connections with suitable sized ball valves. Tank shall be insulated with 25 mm thick nitrile rubber insulation and covered with wire netting and cement plastering. The Tank shall be installed in the open terrace in the Fourth floor at the highest point of the chilled water piping.	No.	1		
31		Supply, installation, testing and commissioning of automatic air purge valves of 20 mm size	Nos.	12		
32		Supply, installation, testing and commissioning of Condenser water piping of GI 'C' class pipes and fittings as per the Technical Specifications. Sizes:				
32.1		100 mm	Rm	6		
32.2		125 mm	Rm	6		
32.3		150 mm	Rm	50		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
32.4		200 mm	Rm	6		
32.5		250 mm	Rm	100		
33		Supply, installation, testing and commissioning of Butterfly valves with fittings for condenser water piping as per the Technical Specifications. Sizes:				
33.1		100 mm	No.	1		
33.2		125 mm	No.	1		
33.3		150 mm	No.	14		
34		Supply, installation, testing and commissioning of Dual plate type non return valves with fittings as per the Technical Specifications. Sizes:				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
34.1		100 mm	No.	1		
34.2		125 mm	No.	1		
34.3		150 mm	Nos.	3		
35		Supply, installation, testing and commissioning of Y- type strainer with fittings as per the Technical Specifications. Sizes:				
35.1		100 mm	No.	1		
35.2		125 mm	No.	1		
35.3		150 mm	Nos.	3		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
36		Supply, installation, testing and commissioning of Balancing valves for condensers as per the Technical Specifications. Sizes:				
36.1		100 mm	No.	1		
36.2		125 mm	No.	1		
36.3		150 mm	Nos.	3		
37		Supply, installation, testing and commissioning of Flow switches for condensers and chillers	Nos.	4		
38		Supply, installation, testing and commissioning of Water pressure gauges with siphon and cock	Sets	26		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
39		Supply, installation, testing and commissioning of Thermometer, industrial type with couplings	Sets	8		
40		Supply, installation, testing and commissioning of drain piping of hard PVC pipe and fittings, insulated with 12 mm thick nitrile rubber. Size:				
40.1		25 mm	Rmt.	300		
40.2		32 mm	Rmt.	25		
40.3		40 mm	Rmt.	35		
40.4		50 mm	Rmt.	12		
41		Supply, installation, testing and commissioning of Exhaust Blower of SISW construction, complete with drive motors and drive arrangement, electrical starter panel with required rating circuit breaker of the following capacity.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
41.1		4500 CFM @ 40 mm st. pr. for CSSD in Stilt floor	No.	1		
42		Supply, installation, testing and commissioning of wall mounted propeller type exhaust fans complete with mounting frame, mesh guard and gravity louvers. Capacities as follows:				
42.1		225 mm dia. 1400 rpm	Nos.	20		
42.2		300 mm dia 1400 rpm	No.	1		
42.3		380 mm dia 1400 rpm	No.	1		
42.4		450 mm dia. 1400 rpm	No.	1		
43		Supply, installation, testing and commissioning of under deck insulation for roof areas exposed to sun light, using 50 mm thick TF grade eps slabs as per the Technical Specifications.	Sq mt.	2000		
		Total				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
LIFTS WORKS						
	1	I. BED CUM PASSENGER LIFT Supply, Installation, Testing, Commissioning and handing Over of 26 passenger cum bed lift as per the following technical specifications including all taxes and duties complete.				
		Technical Specifications.				
		2) Type of Lift - Bed cum Passenger Lift				
		3)Capacity of Lift - 26 Passengers				
		4) Speed - 1 M / sec				
		5)Type of drive - AC variable voltage				
		Variable Frequency drive				
		system (With Close loop)				
		6) No of Floors - Stilt + Ground + First floor + second floor + Third floor				
		7) Total Travel - 20.5 Mts				
		8) Levelling - High level accuracy with				
		accuracy smooth jerk free stopping				
		9) Construction - High Quality stainless steel				
		of Car scratch proof surface - Moon				
		Rock finish				
		10) Hand rails - Stainless steel Mirror finish				
		not less than 600mm long at				
		900mm above floor level to be				
		fixed adjacent to the control				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		panel in the lift car.				
		11) Car Size -1600 x 2400				
		11a. Lift well size : 2400 x 3000				
		12) Car Entrance -1200 x 2000				
		13) Car Entrance _ Automatic Power operated				
		Door centre opening Horizontal				
		sliding stainless steel				
		scratch free surface.				
		14) Operation - Microprocessor based				
		automatic push button				
		duplex collective selective				
		with / without attendant				
		15) Flooring - 4mm Thick Vinyl Tiles				
		16) False Ceiling - Perplex false ceiling				
		17) Position of _ Directly above the lifts				
		Machine				
		18) Landing Centre opening SS				
		Entrance - hair line finish door with				
		Door provision for emergency key				
		opening at all landings				
		19) Power _ 415V 3 Phase 50HZ 4 wire				
		Supply system				
		20) Car Fittings - Compact Fluorescent lights				
		6 nos and 400mm sweep				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		cabin fans - 2 Nos.				
		21) Indication - UP/Down Scrolling direction				
		and position indicator in car				
		and all landing digital floor				
		Position indicator scrolling				
		type in car and at all landing				
		22) Emergency Battery operated alarm bell				
		Alarm Bell - to be provided with automatic				
		charging device				
		23) Emergency - Battery operated light to be				
		light provided with automatic				
		charging device.				
		24) Fireman _ To be provided at Ground				
		Switch floor				
		25) Automate To facilitate the landing of the				
		Rescue - lift to the nearest floor at the				
		Device line of power failure. This shall				
		consist of suitable type				
		battery system with charger				
		inverter, under voltage				
		Protection system etc.,				
		Complete with all accessories.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		26) Over speed governor, phase failure and phase reversal relay, alarm bell, T Guide brackets for car and counterweight, rubber padding under winding unit, motor of adequate capacity, single reduction worm gear, electromagnetic brake with compression springs, car safety gears, buffers, electro mechanical door locks, emergency keys side supporting angles, motor over load protection devices, final limit switch main suspension ropes counter weights, lifting joints for mounting the machineries, voltage stabilizer for circuit control, lift electrical panel with suitable circuit breaker, shaft lighting etc				
		27) Providing The architraves should cover				
		Architraves the thickness of sill level door				
		frame at the landing and				
		indicator boxes at all landing				
		as per the design preferred by				
		the Engineer in charge				
		28) Provision of Intercom with phone				
		Communication				
		29) Sill Angles				
		and fascia - To be provided by the lift				
		Plates Contractor				
		30) Minor				
		Builder - To be provided by the				
		Work Lift contractor				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
MR		31) Scaffolding - To be provided by the contractor	Nos	6		
	2	Supply, Installation, Testing, Commissioning and handing Over of 6 passenger (408kg) lift as per the following technical specifications including all taxes and duties complete				
		Technical Specifications.				
		2) Type of Lift - Passenger Lift				
		3) Capacity of Lift - 6 Passengers				
		4) Speed - 1 Mt / sec				
		5) Type of drive - AC variable voltage				
		Variable Frequency drive				
		system (With Close loop)				
		6) No of Floors - Stilt + Ground floor + First floor + Second floor + third floor				
		7) Total Travel - 20.5m				
		8) Levelling - High level accuracy with				
		accuracy smooth jerk free stopping				
		9) Construction - High Quality stainless steel				
		of Car scratch proof surface - Moon				
		Rock finish				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		10) Hand rails - Stainless steel Mirror finish				
		not less than 600mm long at				
		900mm above floor level to be				
		fixed adjacent to the control				
		panel in the lift car.				
		11) Car Size -1200 x 1000				
		11a. Lift well size : 1900 x 1700				
		12) Car Entrance -700				
		13) Car Entrance _ Automatic Power operated				
		Door centre opening Horizontal				
		sliding stainless steel				
		scratch free surface.				
		14) Operation - Microprocessor based				
		automatic push button				
		duplex collective selective				
		with / without attendant				
		15) Flooring - 4mm Thick Vinyl Tiles				
		16) False Ceiling - Perplex false ceiling				
		17) Position of _ Directly above the lifts				
		Machine				
		18) Landing Centre opening S.S				
		Entrance - hairline finish door with				
		Door provision for emergency key				
		opening at all landings				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		19) Power _ 415V 3 Phase 50HZ 4 wire				
		Supply system				
		20) Car Fittings - Compact Fluorescent lights				
		6 nos and 400mm sweep				
		cabin fans - 2 Nos.				
		21) Indication - UP/Down Scrolling direction				
		and position indicator in car				
		and all landing digital floor				
		Position indicator scrolling				
		type in car and at all landing				
		22) Emergency Battery operated alarm bell				
		Alarm Bell - to be provided with automatic				
		charging device				
		23) Emergency - Battery oprated light to be				
		light provided with automatic				
		charging device.				
		24) Fireman _ To be provided at Ground				
		Switch floor				
		25) Automate To facilitate the landing of the				
		Rescue - lift to the nearest floor at the				
		Device line of power failure. This shall				
		consist of suitable type				
		battery system with charger				
		invertor, under voltage				
		Protection ayatem etc.,				
		Complete with all accessories.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		26) Over speed governor, phase failure and phase reversal relay, alarm bell, T Guide brackets for car and counterweight, rubber padding under winding unit, motor of adequate capacity, single reduction worm gear, electromagnetic brake with compression springs, car safety gears, buffers, electro mechanical door locks, emergency keys side supporting angles, motor over load protection devices, final limit switch main suspension ropes counter weights, lifting joints for mounting the machineries, voltage stabilizer for circuit control, lift electrical panel with suitable circuit breaker, shaft lighting etc				
		27) Providing The architraves should cover				
		Architraves the thickness of sill level door				
		frame at the landing and				
		indicator boxes at all landing				
		as per the design preferred by				
		the Engineer in charge				
		28) Provision of Intercom with phone				
		Communication				
		29) Sill Angles				
		and facia - To be provided by the lift				
		Plates Contractor				
		30) Minor Builder Work- - To be provided by the contractor	Nos	2		
MR		31) Scaffolding - To be provided by the contractor				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	4	II. DUMB WAITER -Supply, Installation, Testing, Commissioning of and handing Over of 250 Kg Dumb Waiter as per the following technical specifications including all taxes and duties complete with voltage stabilizer for circuit control, dumb waiter electrical panel with suitable circuit breaker etc				
		Technical Specifications.				
		2) Type of Lift - Dumb Waiter				
		3)Capacity of Lift - 250 Kg				
		4) Speed - 0.5 Mts / sec				
		5)Type of drive - Single Speed Drive				
		6) No of Floors - Stilt + Ground + First floor + Second floor + Third floor				
		7) Total Travel - 12.5mts				
		8) Levelling - High level accuracy with accuracy smooth jerk free stopping				
		9) Construction - M.S Painted - Bleaumont of Car				
		10) Car Size - 1000 X 1000 X 1200				
		W X D X H				
		11) Car Opening - 1000 X 1200				
		12)Car Entrance - Collapsible Gate - With finish				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Door				
		13) Operation - External Extended Push				
		Button with / without attenant				
		14) Landing				
		Entrance - Collapsible Gate - M.S. Painted				
		Door				
		15) Power _ 415V 3 Phase 50HZ 4 wire				
		Supply system with suitable electrical panel & starter				
		16) Car Fittings - Bulk Head fitting and circular				
		fan				
MR		17) Indication - Arrows in landing only.	Nos	2		
		[For 2 Nos for Trauma and 2 Nos for OBG]				
		Total				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
UPS SYSTEM						
UPS						
		Supply, Installation Testing and commissioning of double conversion, DSP Based, True on line UPS system with 415V +/- 15% V, 50Hz, 3Ph Input & 415V +/- 1%, 50 Hz, 3Ph Output, working on 16 Bit microprocessor Architecture, Isolation transformers, RS 232 ports, monitoring software, O/L, SC. protections & self diagnostic features, LCD Display Panel for Functions & all parameters, complying with IEC standards. Convertors, Invertors & Battery Charger shall utilize PWM technology with IGBT. Battery Back up time of 30 minutes with required No of Tubular Battery of 12V, 150 AH with Battery management System, housed in suitable Cabinet /stand, Static ByPass, complete with Internal wiring & all accessories to be provided. The System shall have in-built P.F.correction & shall ensure THD as per latest International standards. The efficiency of UPS shall be 98% or more.				
1		2 x 120KVA in Parallel Redundant System with Individual Battery Bank	Nos	1		
		TOTAL		Rs		
BMS SYSTEM-						
BUILDING MANAGEMENT SYSTEM						
1		Supply and installation of PC Pentium duo Processor, 1GB RAM, 80GB HDD, CD-ROM Drive & 17inch colour monitor, key board, mouse with A4 Laser printer complete with all accessories.	ea	2		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
2		Supply, Installation, Testing of IBMS Graphical interface software with 2 Web Clients based on MS Windows XP Professional complete.	lot	1		
3		Supply, Installation and Testing of System Interface Controller for DDC complete.	lot	1		
4		SITC of Chiller Plant Manager for interlinking the two chillers, chilled water and condensor water pumps and cooling tower as per technical specification. Also Intergration of VRV, VFD for PUMP, BTU & Energy meter, Lighting Control etc through MODBUS Rs 485 interface.	lot	1		
5		Supply, Installation and Testing of Portable Operator Terminal (POT) capable to be hooked to any DDC controller to monitor and change set points of any parameter and communicate to any DDC controller in the network complete.	lot	1		
6		Supply, Installation and Testing of DCC Controllers with in-built real time clock, Battery Back up, 32 bit micro-processor for the following as per Input/Output Summary complete (as per IO points)				

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
a		chillers-2 No	lot	1		
b		AHU 12 Nos (Max 2 AHUs per DDC)	lot	1		
c		FCUs	lot	1		
d		Exhaust Fan (as per I/O points)	lot	1		
e		Water Management System (as per I/O points)	lot	1		
f		Main L.T. Panel - 1 No	lot	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
g		Lifts - 6 Nos	1	1		
h		DG status	1	1		
7		Software Integration of the following through Modbus RS485 Interface	Lot	1		
		VRV Interface -Bacnet/Modbus communication - 6Nos				
		VFD for Secondary Pump & AHU - 16 Nos				
		Energy Meter Communication - 12 Nos				
		Lifts - 6 Nos				
		FCU -24 Nos				
8		FIELD DEVICES				
a		Supply, Installation and Testing of Outside Temperatrure & RH sensor complete	No	2		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
b		Supply, Installation and Testing of Immersion Temperature Sensor complete	Nos	16		
c		Supply and installation of CO2 sensor complete with connection through the fresh air dampers with copper wires in PVC pipe complete with all accessories	Nos	12		
d		Supply, Installation and Testing of Water DP Switch for Pump ON/OFF Status complete	Nos	6		
e		Supply, Installation and Testing of Water Level Switch complete	Nos	4		
f		Supply, Installation and Testing of Air DP Switch for Fan status complete	Nos	60		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
g		Supply, Installation and Testing of Air DP Switch for Filter status complete	Nos	12		
h		Supply, Installation and Testing of Duct temperature Sensor complete	Nos	12		
i		Supply, Installation and Testing of Duct temperature & RH Sensor complete	Nos	12		
j		Supply, Installation and Testing of Air Differential Pressure sensor for filter complete	Nos	12		
k		Supply, Installation and Testing of Room temperature Sensor complete	Nos	12		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
l		Supply, Installation and Testing of On/Off damper Actuator complete	Nos	12		
m		Supply, Installation and Testing of Communicable FCU Room temperature controller with display and set point adjustment with Modbus RS485 Interface	Nos	24		
n		Supply, Installation and Testing of Variable Frequency Drive				
		11KW VFD for Secondary Pumps complete	Nos	3		
o		Supply, Installation and Testing of 2-way motorized modulating valves for the following dia				
		40mm Dia for Air Handling Units	Nos	6		
		25mm Dia for FCUs	Nos	104		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
9		DATA BACKBONE FOR FIBER				
a		Supply, Installation, Testing and Commissioning of 6 - core 9/125U SM outdoor optical fibre cable.	MTRS	350		
b		Supply, Installation, Testing and Commissioning of SC - simplex connector single mode.	Nos	40		
c		Supply, Installation, Testing and Commissioning of SC duplex connector single mode.	Nos	20		
d		Supply, Installation, Testing and Commissioning of LIU 12 port rack mount BLK.	Nos	4		
e		Supply, Installation, Testing and Commissioning of patch cord LC-SC duplex 2MTR SM	MTRS	10		
10		Cabling & Conduits				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
a		Supply and laying of Signal cable 2c x 1.0 sq,mm ATC Flexible Shielded for AI & AO signals in the existing PVC pipe complete with all accessories	Mtrs	1500		
b		Supply and laying of Signal cable 2c x 1.0 sq,mm ATC Flexible UnShielded for DI & DO signals in the existing PVC cable complete with all accessories	Mtrs	1000		
c		Supply and laying of Communication Cable - CAT6 Cable in the existing PVC cable complete with all accessories	Mtrs	2000		
d		Supply and laying 25 mm PVC rigid conduit pipe with suitable clamps complete with all accessories	Mtrs	6000		
		GRAND TOTAL				
NOTE		BMS System should be of seimens,honeywel ,sehinders.				
DATA & NETWORKING, CCTV SUMMARY						
I		DATA & NET WORKING				
II		CCTV SYSTEM				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
III		MASTER ANTENNA TV SYSTEM				
		TOTAL IN Rs				
DATA & NETWORKING, CCTV WORKS						
		PART-I				
		DATA:- SUPPLY,Installation,Testing & Commissioning of Data Net Working complete with VDI Structured CABLING & co-ordinating with Server System Supplier				
		SERVER				
1		Supply, Installation, Testing and Commissioning of DUAL CORE 3.0 GHz processor with 5 MB CACHE / 1333 MHz FSB; 2 GB MEMORY / 250 GB SATA HARD DISK / GIGABIT ETHERNET ON BOARD / DVR-ROM / KEYBOARD / MOUSE WITH Windows 2008 Server with 5 User Pack OEM (Make:-INTEL XEON E5 or Eqv IBM)	No	1+1		
2		Supply, Installation, Testing and Commissioning of core switch as per the technical specifications	No	2		
		i) (24) 10/100/1000 auto-sensing, auto-negotiating, MDI/MDI-X RJ45 ports				
		ii) (4) mini-GBIC combo ports				
		iii) (2) dedicated stacking ports				
		iv) (1) DB9 console port				
		CORE SWITCH Type Cisco WS-C3750X-24T-L or eqv DLINK/NORTEL				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
3		Supply, Installation, Testing and Commissioning of Edge switch as per the technical specifications	No	12		
		i) (24) 10/100/1000 auto-sensing, auto-negotiating, MDI/MDI-X RJ45 ports				
		ii) (4) mini-GBIC combo ports				
		iii) (2) dedicated stacking ports				
		EDGE SWITCH Type CISCO WS-C2960S-24TS-L OR eqv DLINK/NORTEL				
4		Supply, Installation, Testing and Commissioning of LIU 12 port rack mount BLK.	Nos	6		
5		PATCH PANEL with UTP CAT6 24RJ Connectors complete	No	12		
6		42 U Network cum Server Rack Assembly, Floor Mounting, made of Aluminium Channels equivalent to Euro Rack System with side and rear panels made of Powder Coated sheet steel, front transparent perspex door and with rails, rollers with fans will be provided at the top for ventilation. Make : Netrack/Legrand/ DLink	Nos	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
7		15 U Wall Mounting cabinet with Standard Accessories like Power Supply units etc FOR Patch panel	No	12		
8		4 pair CAT 6 cable Make: D-link/Finolex/LEGRAND	Box(305 M)	25		
9		Supply, Installation, Testing and Commissioning of 6 - core 9/125U SM outdoor optical fibre cable.	MTRS	50		
		Multimode Fiber Optic cable-Type OM2(50/125uM)				
		Supply, Installation, Testing and Commissioning of SC - simplex connector single mode.	Nos	40		
		Supply, Installation, Testing and Commissioning of SC duplex connector single mode.	Nos	20		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		50 Pair Jelly filled Riser cable	Mtr	200		
		100 Pair Jelly filled Riser cable	Mtr	50		
		50 Pair Krone Box	No	3		
		100 Pair Krone Box	No	1		
n		80x50x 2mm mm PVC Casing/ Trunking with accessories	Mtr	500		
o		Plastic Box(Surface/ Flush Mount) 1/2 module	Nos	150		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		TOTAL FOR DATA / NETWORKING(PART-T)				
		PART-II				
		Closed Circuit TV System				
		supply.installation,Testing & Commissioning of CCTV system consisting of the following items,but not limited to it ,for total integration of the system				
		Indoor Camera :- CCD camara with colour flexidome , 3.5mm varifocal lens,capable of operating in min Lux level of 0.2 lumens or less,min 660 TV lines, min 25 M IR range,compatible for CCTV application,in IP;65 housing with all accessories complete Make - Bosch/Videotec/Pelco	Nos	28		
1						
		Out door PTZ Camera with Power supply unit & PTZ controller	Nos	2		
2						
		Power Supply unit (For camera) (24V AC/ 50 Hz or as per Camera requirement)	Nos	30		
3						
		DIGITAL VIDEO RECORDER				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
4		Stae of the Art IP based, 16 Channel digital video recorder of Embedded Type with dual streaming Technology for Video & Audio, with Web Server feature, Mouse/ Joy stick Controller for Cameras, multi-client Viewing ,capable of supporting upto 5 T or more bytes,high resolution,multiscreen display & recording , capable of supporting Thumb Drive,HDD& Optical devices through USB,suitable for operation on 230 V,1Ph,50 Hz supply complete with required soft ware & interlinking of all DVRs Make: GE SecurityModel DVSR 16 EA or Eqv of Sony/Bosch/Pelco	Nos	2		
		32" LCD TV compatible for CCTV System Make - Sony/LG/Sharp	Nos	2		
5						
		Cable and Conduiting				
6		Supply & laying of CCTV Co-Axial Unarmoured cable in existing conduit, Cable shall be with solid bare annealed Cu conductor, HRPVC/ Polyethylene insulated, shileded with mylar tape,Al wire braided with black PVC outer sheath/jacket. cable compatible for good connectivity & requirement for CCTV system(Make:-Havells/Varsha/ Finolex/ RRCables)	mtr	1000		
		TOTAL FOR CCTV SYSTEM				
		PART-III				
		MASTER ANTENA TV (MATV) system				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
25		The Scope of work is Supply, installation, Testing for T.V. System with following Items & components in Rooms & other Specific Areas. It also covers co-ordination with T.V service provider for completeness & usage of the Items /components erected by Vendor				
		T.V. CONNECTION				
		A. Supply and fixing of booster amplifier	No	3		
		B. Supply and fixing of 3 way splitter	Nos	12		
		C. Supply and laying of RG 11 co-axial cable in the existing PVC pipe	Mtr	1200		
		TOTAL FOR MATV				
PA SYSTEM, EPBAX, OHP & NS SUMMARY						
I		P.A SYSTEM				
II		TELEPHONE SYSTEM.				
III		OVER HEAD PROJECTOR				

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
IV		NURSE CALL SYSTEM				
		TOTAL IN Rs				

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
PA SYSTEM,EPBAX, OHP & NS WORKS						
1		PUBLIC ADDRESS SYSTEM				
a		26U high 19" width, 650mm depth, Rack assembly Made of Aluminium Channels Side and Rear panels made of 16 SWG powder coated steel sheet Front transparent perspex door Bearing with rails, and rollers Ventilated type Side panels Powder coated to 'Siemens Grey' colour as per IS 5 Spare U covered with blank panels Suitable for mounting. one System Controller, two Mixer Amplifier one Music Source (Optional) Make-Siemens/Bosch	Nos	1		
b		Programmable System Controller with built in DVR, zone selection for 12 zone, having 1st level priority for DVR, 2nd level for Announcement & Music. with built in monitoring facility. Make: BOSCH /Siemens or EQV	Nos	1		
c		Call station with zone selector & all Facility with goose neck microphone for 12zones Make : Bosch /Siemens(Nos	2		
d		Compact Music system with 3CD Changer, Double Deck cassette player, and AM/FM Tuner built in single module. OPTIONAL) Make: Philips Model: V230/Sony	Nos	1		
e		480Watts Power Amplifier (1+1Std by) with dual inputs,priority Switching,70/100V& 80hms output,suitable for 230V,Ph,50Hz with Battery Back-up. Make: Bosch Model : LBD 1916/Phillips	Nos	2		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
f		6 Watts Wooden Box Cabinet Speaker Make:Bosch Model:LBD 3902/Philips	Nos	8		
g		2 core 24/0.2 mm ATC twin twisted unarmoured LS Cable Make-Finolex/Havells/D-Link	Mtr	2200		
h		Main junction box to terminate field cables with necessary tags	Nos	15		
i		12 Watt Wall Mounting Speaker Make:Bosch Model:LBD 3902/Philips	Nos	4		
j		6 Watt false Ceiling Mounting Speaker Make:Bosch Model:LBD 3902/Philips	Nos	80		
		TOTAL AMOUNT FOR P.A. SYSTEM.				
		TELECOMMUNICATION				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
1		EPABX:- Supply,Installation,Testing & Commissioning of micro-processor based, state of the Art, Telephone PBX System				
		, IP READY,based on Linux/GRUB compliant, integrated Software for multiTasking for Hospitality Services including Billing ,comprising of items as below but not limited to them. Expanadable upto 500 Ports				
		Providing PRI cards for Trunk lines / for tie line				
		with reqd.software				
a		16Analog Trunk Lines	Nos	1		
b		4 Digital Extensions				
c		250 Analogue Extensions(Expandable up to 300)				
d		In-Built Voicemail (4 Port & 80 Min)				
e		LAN Connectivity				
f		Embedded WELCOME MESSAGE				
g		Least Cost Routing				
h		Personal Assistant				
i		Music on Hold				
		(Make - Siemens/ AVAYA/ALCATEL)				
2		a. 200 pair MDF with KRONE disconnection modules (System MDF & Customer MDF)	Nos	1		
a		100Pair MDF	Nos	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
b		50Pair MDF	Nos	3		
c		SCP & IPM's for Trunk Lines	Nos	8		
d		Jumper Cable	Mtr	75		
e		IDF 20 Pair	Nos	2		
3		Desktop Digital operator Console with Caller Identification, Reception of text message, Message LED, Programmable keys, Navigational keys, Guide key, loud speaker, Integrated alphabetical key board Make - Alcatel Model: A-4035/ Eqv Siemens/Nortel/Ayaya	Nos	2		
a		Head Set for operator Console (optional)	Nos	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
b		Calling Bill Software	Set	1		
		TELEPHONES				
c		Analog push button telephone with Caller ID, flash and radial	Nos	200		
d		Digital Executive phone with 3x16 / 2x24 character alpha	Nos	24		
		numeric display, 12 programmable keys with 2 colour LED's etc				
4						
		Supply,laying & Termination of Telephone Wires/ Cables as per DOT spcn,with solid annealed Cu Conductor of 0.5mm thick, High Density Polyethylene insulated,Twisted pair,unarmoured ,with outer sheath of low density Polyethylene (Make:-FINOLEX/ DELTON/HAVELLS)				
a		5pair 0.5mm unarmoured telephone Cu cable	Mtr	2000		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
b		10 pair 0.5mm unarmoured telephone Cu cable	Mtr	1000		
c		20 pair 0.5mm unarmoured telephone cable	Mtr	200		
d		50 pair 0.5mm unarmoured telephone Cu cable	Mtr	100		
5		S,I & T of Outdoor Telephone Cables as per DOT spcn,with solid annealed Cu Conductor of 0.5mm thick, High Density Polyethylene insulated,Twisted pair Jelly filled,,Inner sheath of Polyethylene& core wrapping, moisture barrier with Al tape , Double G.I.wire/strip armoured ,with outerjacket of low density Polyetylene (Make:-FINOLEX/ DELTON/HAVELLS)				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		100Pair(for College)	Mtr	100		
5		Power pack Unit with Batteries, Charger etc for 2 Hrs Back-up compatible for above System	Lot	1		
		TOTAL AMOUNT for TELEPHONE SYSTEM.				
		OVER HEAD PROJECTOR				
		Screen: Pull down screen, High Gain mat White with size 6 Ft X 5 Ft	Nos	1		
		LCD Projector COMPATIBLE WITH IBM PC : - Brightness of 3000 ANSI 1 --> Lumens with contrast ratio of 2000:1 with a resolution of 1024 X 768, supplied with cordless remote control, VGA cable. Make - ACER / Panasonic/Sony/LG	Nos	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Ceiling Mount Kit	Nos	1		
		TOTAL AMOUNT-OHP				
		NURSE CALLING SYSTEM				
		(Wired System)(Make:- Royal Electronics/ GE Health Care/Process Care)_				
		Micro-Processor based Nurse Calling System complete with Microswitch , Remote Display Panel with LED lit Windows,@Nurse Station, LED Display outside patient Room. Complete suitable for 230V,1Ph,50 Hz supply				
a		16 Window Display Panel with Controller, Inbuilt SMPS,Protections, Acceptance Button, Pre-Recorded Voice Announcement, Alarm Cancel,& Electronics Complete	No	15		
b		8 Window Display Panel with Controller, Inbuilt SMPS,Protections, Acceptance Button, Pre-Recorded Voice Announcement, Alarm Cancel,& Electronics Complete	No	3		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
c		Bed side Unit with soft Touch call Button,Reset& Indication	No	264		
d		Wiring 4 Pair Telephone cable/ Wire in PVC Conduit	Rmt	5500		
		TOTAL FOR NURSE CALL SYSTEM				
SEWAGE TREATMENT PLANT (STP) (MECHANICAL EQUIPMENTS)						
Sewage Treatment Plant						
1	MR	Supply, Erection testing, trial run and commissioning of STP 65Cum/Day Pre Fabricated Type (FAB Technology)including all items for a fully functional STP ,not limited to but including the following specifications;				
		SS Bar Screen & o & G Trap				
		FEED PUMPS - 1.1 KW, 3Cum/hr (2 Nos)				
		FAB TANK - 1.1m dia x 6m Height (2 Nos)				
		TUBE SETTLER - 1.4 x 1.4 x 2.7 m Height				
		AIR BLOWER - 5.5 KW 5.5KW, 105Cum/hr @ 4500MWC				
		SAND FILTER - 500mm Dia				
		CARBON FILTER- 500mm Dia				
		PUMPS FOR THE PSF/ACF 3Cum/hr, 1.5 KW				
		CENTRIFUGE SYSTEM 1Set				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
2	MR	All electrics and instrumentation works for the successful commissioning & operation of the STP to fulfill the designed capacity including necessary electrical panels with required rating circuit breaker, motor starters, motors (with standby), pumps (with standby), power & control cable, earthing, illumination of the panel room and STP area with required T5 tube including wiring & cabling. The electrical and instrumentation works has to be on total turnkey basis meeting all the requirements of statutory bodies.				
3	MR	Civil works				
		i. Coarse screen chambers (1)				
		ii. Sewage lift pumphouse (1)				
		iii. Fine screen chamber (1)				
		iv. Grit channels (2)				
		v. Equalization tank (1)				
		vi. Flow distribution chamber (1)				
		vii. Aeration tanks (3)				
		viii. Secondary settling tanks (3)				
		ix. Sludge pump house (1)				
		x. Sludge digester (1)				
		xi. Sludge drying beds (2)				
		xii. Parshall flume flow measuring structure (1)				
		xiii. STP Electrical panel room (1)				
		xiv. Tertiary Treatment Plant (1) & Blower Room (1) (including Filter Feed Sump and Reclaimed Water Sump)				
		xv. Other Services (such as storm water drains, plant roads, pavement / foot path, drinking water lines and drainage platform, toilet facility, fencing and entry gate for STP)				
4	MR	Erection testing, trial run and commissioning.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5	MR	Supply of spares for 2 years trouble free operation including all taxes and duties, freight and transit insurance.				
		TOTAL				
WATER TREATMENT PLANT (WTP) (MECHANICAL EQUIPMENTS)						
1	MR	Supply, Erection testing, trial run and commissioning of WTP of 25Cum/Hour and as per following specification;				
		Raw Water Pumps - 25cum/hr at 25MWC Head -	Nos	2		
		Chlorine Doser - 0 -6LPH Electronic Diaphragm Type	Nos	1		
		DUAL MEDIA FILTER - 1300 MM DIA X 1500 MM HOS - MOC SHALL BE MSEP	Nos	1		
		ACTIVATED CARBON FILTER - 1500 MM DIA X 1500 MM HOS - MOC SHALL BE MSEP	Nos	1		
		WATER SOFTENER - 800 MM X 1500 MM HOS WITH 975 LTR RESIN - MOC - MSEP	Nos	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		INTER CONNECTING PIPING	LoT	1		
		All electrics and instrumentation works for the successful commissioning & operation of the WTP to fulfill the designed capacity including necessary electrical panels with required rating circuit breaker, motor starters, motors (with standby), pumps (with standby), power & control cable, earthing, illumination of the panel room and WTP area with required T5 tube including wiring & cabling. The electrical and instrumentation works has to be done on total turnkey basis meeting all the requirements of statutory bodies.				
		TOTAL				
2	MR	Supply, Erection testing, trial run and commissioning of Hydropneumatic System as per following specification;				
		Discharge - 80Cum/hr at 80 m Head with 1working and 1 Standby Pump including auto level sensor with cable	LS	set		
		TOTAL				
EFFLUENT TREATMENT PLANT (ETP) (MECHANICAL EQUIPMENTS)						
EFFLUENT Treatment Plant						
1	MR	Supply, Erection testing, trial run and commissioning of fully functional ETP 35Cum/Day which includes but not limited to following;				
		SS Bar Screen & o & G Trap				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		FEED PUMPS - 2Nos				
		FAB TANK				
		TUBE SETTLER				
		AIR BLOWER				
		PUMPS FOR THE PSF/ACF				
		CARBON FILTER				
		PUMPS FOR THE PSF/ACF				
		CENTRIFUGE SYSTEM 1Set				
2	MR	All electrics and instrumentation works for the successful commissioning & operation of the ETP to fulfill the designed capacity including necessary electrical panels with required rating circuit breaker, motor starters, motors (with standby), pumps(with standby), power & control cable, earthing, illumination of the panel room and ETP area with required T5 tube including wiring & cabling. The electrical and instrumentation works has to be done on total turnkey basis meeting all the requirements of statutory bodies.				
3	MR	Civil works For ETP LS				
4	MR	Erection testing, trial run and commissioning.				
5	MR	Supply of spares for 2 years trouble free operation including all taxes and duties, freight and transit insurance.				
		TOTAL				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
FIRE PROTECTION AND FIRE DETECTION & ALARM SYSTEM						
		PART - A. FIRE WATER PUMPING SYSTEM				
1		a. Horizontal end suction top discharge centrifugal pump of cast iron body & bronze impeller with stainless steel shaft of 137 Cu.M per hour at 70MWC head as per CPWD specification				
		b. Suitable HP Sq. cage induction motor, TEFC, synchronous speed 2900 RPM, suitable for operation on 415 volts, 3 phase 50 Hz AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-F insulation, conforming to IS -325				
		c. M.S fabricated common base plate, coupling, coupling guard, foundation bolts etc. as required.				
		d. Suitable cement concrete foundation duly plastered with anti-vibration pad.	Set.	1		
2		Supplying, Installation, Testing and Commissioning of diesel engine driven standby fire pump suitable for automatic operation and consisting of following: complete in all respect as required.				
		a. Horizontal end suction top discharge centrifugal pump of cast iron body & bronze impeller with stainless steel shaft of 137 Cu.M per hour at 70MWC head as per CPWD specification				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		b. Suitable HP, water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 24/12 Volts electric starting equipment, Diesel Tank, residential silencer, instruments and protection as per specification, stop solenoid for autostop in the event of fault with audio indications, painted with post office red colour etc. as required.				
		c. M.S. fabricated Common base plate, coupling, coupling guard, foundation bolts etc., as required.				
		d. Suitable cement concrete foundation duly plastered with anti vibration pads.	Set.	1		
3.		c. 100mm dia exhaust pipe with necessary fittings including insulated with 50 mm thick glass wool with 1.0mm thick aluminium sheet cladding.	Mtrs.	12		
4.		Supplying, Installation, testing and commissioning of electric driven pressurisation pump suitable for automatic operation and consisting of following:complete in all respect as required.				
		a. Horizontal end suction top discharge centrifugal pump of cast iron body & bronze impeller with stainless steel shaft of 10.8 Cu.M per hour at 70MWC head as per CPWD specification				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		b. Suitable HP SQ cage induction motor, TEFC type suitable for operation on 415 volts, 3 phase 50 Hz AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-F insulation, conforming to IS-325				
		c. M.S fabricated common base plate, coupling, coupling guard, foundation bolts etc. as required.				
		d. Suitable cement concrete foundation duly plastered with anti vibration pads.	Set	1		
4		Supplying, installation, testing and commissioning vertical monoblock submersible dewatering pump of 1Cu.M/hr discharge of water at 11 m. head complete with all accessories suitable for operation on 230V, single phase, 50 Hz.AC supply complete with starter for automatic operation including water level sensing device, inter-connection with submersible cable etc. as required.	Set.	1		
5		Supplying, installation, testing and commissioning of electrical control panel of cubical construction, floor mounted type, fabricated out of CRCA sheet, compartmentalised with hinged lockable doors, dust and vermin proof, powder coated of approved shade, cable alley, inter-connection, having switchgears and accessories mounting and internal wiring, earth terminals, numbering etc. complete in all respect, suitable for operation on 415V, 3 phase, 50 HZ. AC supply with enclosure protection class IP 42 as required.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		A. COMMON PANEL IN FIRE PUMP HOUSE				
		(I) INCOMER				
		(a) Suitable rating TPN SFU with HRC fuses				
		(b) Voltmeter (0-500 Volts) with selector switch				
		(c) Ammeter with selector switch & CT's etc.				
		(d) Set of 3 Phase indicating lamp.				
		(e) Suitable rating Al.bus bar				
		(II) OUTGOING.				
		(a) Main Fire pump.				
		1 No. - Suitable rating TPN SFU with HRC fuses with suitable HP star/delta starter with over load protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch auto/manual operation.				
		(b) Jockey pump				
		1 No. - Suitable rating TPN SFU with suitable HP DOL starter, overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch auto/manual operation.				
		c) Feeder for Dewatering pump with Suitable rating MCB				
		d) Feeder for Diesel engine control panel with Suitable rating MCB				
		(e) electrical hooter with ON/OFF switch for the above pumps running indication				
		(f) necessary potential free contact for indication of above pumps running/fault/trip in the addressable fire alarm panel/BMS Panel.	set.	1		
6		DIESEL ENGINE CONTROL PANEL				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		Control panel for Diesel Engine comprising:				
		(a) Auto/Manual selector switch & 3 attempt starting device, timers and relays as required, push buttons, start/stop in manual mode..				
		(b) Indication lamp for High/Low Lub.oil pressure, High Water Temp. and Engine ON Indication.				
		(c) Battery charger suitable for 12/24V DC with boost and trickle selector switch, with digital panel meter for AC, DC voltage and Ammeter for battery charging current				
		(d) necessary potential free contact for indication of diesel engine driven fire pump running/fault in the addressable fire alarm panel/BMS Panel.				
		(e) All standard relays and accessories for automatic operation of diesel engine	Set	1		
7		Supplying and Laying of suitable size XLPE insulated, PVC sheathed aluminium conductor 1.1 KV grade armoured cable of following sizes on surface/in existing cable tray suitably clamped as required.				
		(a) for electrical motor driven main pump	Mtrs	15		
		(b) for electrical motor driven Jockey pump	Mtrs	15		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		(c) for electrical motor driven dewatering pump	Mtrs	15		
8		Supplying and Laying of XLPE insulated control wiring with multicore copper stranded conductor of following sizes, PVC sheathed armoured cable between various sensors and system controller/starter etc. in pump house & out side on surface/existing cable tray complete with connections at both end with glands etc. as required.				
		(a) 12 x 2.5 sq.mm	Mtrs	20		
		(b) 2 x 1.5 sq.mm	Mtrs	60		
9		Supplying and making end termination with brass compression gland & Al. lugs for following sizes of PVC insulated, PVC sheathed/XLPE Al. Conductor cables of 1.1 KV grade as required.				
		(a) for main pump cable	Sets.	2		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		(b) for jockey pump cable	Sets.	2		
		(c) for dewatering pump cable	Sets.	2		
		(d) for 12Cx2.5Sq.mm cable	Sets.	2		
		(e) for 2C x 1.5 Sq.mm cable	Sets.	10		
10		Supplying, installation and testing of earthing station with tinned G.I electrode plate of size 600mm x 600mm x 6mm thick with 2 Nos of 50 mm x 6 mm G.I. Strips from earth electrode 50 mm dia medium class G.I. Pipe, C.I. funnel with 20 gauge G.I. wire mesh, masonry chamber of 450 mm x 450 mm with concrete base , C.I. man hole cover with frame, painted with bituminous paint and packing with bitumastic paint and packaging with mixture charcoal and salt around plate of electrode including digging of earth pit upto permanent moisture level but not less than 3 meters and back filling earth.	Set.	2		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
11		Providing and fixing 50x6mm size GI strip earth electrode on surface or in recess for earth connections as per specifications complete as required.	Mtrs	50		
12		Providing and fixing 6 SWG dia G.I wire on surface or in recess for loop earthing complete as required.	Mtrs	20		
13		Fabrication and Installation of following sizes of perforated MS cable tray including horizontal and vertical bends, reducers, tees, cross members and other accessories as required duly suspended from the ceiling with MS suspenders and including painting with post office red synthetic paint as required.				
			Mtrs	15		
		(a) 100 mm.(W)x50mm (D)x1.6mm(T)				
			Mtrs	15		
		(b) 150 mm.(W)x50mm (D)x1.6mm(T)				
14		Fabrication and fixing of Dashpot of suitable size for mounting instruments	Each.	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
15		Providing and fixing of pressure switches	Each.	3		
16		Providing and fixing of pressure gauge assembly comprising of				
		a. 0-16 Kg/Sq.cm SS construction glycerine filled pressure gauge				
		b. suitable type SS construction syphon tube				
		c. suitable size isolation ball valve	Set	5		
17		Providing, Installation, testing and commissioning of 25 mm dia gun metal screwed ball valves	Each.	9		
18		Providing, Installation, testing and commissioning of 25 mm dia gun metal screwed non return valve	Each.	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
19		Supplying & fixing air vessel made of 250mm dia 8mm thick MS pipe of 1200 mm long with necessary safety relief at top of the vessel also for provision of mounting 25mm dia gunmetal valves for drain and to connecting to system.	Each	1		
20		Providing, laying, testing & commissioning of 'C' class heavy MS galvanised pipes conforming to IS 3589 and 1239 including fittings, like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc. fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required.				
		(a) 200 mm dia (wall thickness 6.35mm)	Mtrs	12		
		(b) 150 mm dia	Mtrs.	18		
		(c) 80 mm dia	Mtrs	6		
		(d) 50 mm dia	Mtrs	24		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		(e) 25 mm dia	Mtrs	18		
21		Supplying, fixing, testing and commissioning of Cast Iron butterfly valve PN 1.6 as per specification				
		(a) 150 mm dia	Each.	4		
		(b) 50 mm dia	Each.	3		
22		Supplying, fixing, testing and commissioning of double flanged sluice valve of rating PN 1.6, with non-rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets, conforming to IS 14846, of following sizes as required.				
		(a) 200 mm. dia	Each.	4		
		(b) 80 mm dia	Each.	1		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
23		Providing, installation, testing and commissioning of Cast Iron 'Y' type strainer with SS mesh				
		(a) 200 mm dia	Each.	2		
		(b) 100 mm dia	Each.	1		
		(c) 80 mm dia	Each.	1		
24		Providing, installation, testing and commissioning of Wafer type non-return valve of following sizes				
		(a) 150 mm dia	Each.	3		
		(b) 50 mm dia	Each.	1		
25		Supplying & fixing 4 way fire brigade connection of cast iron body with 4 nos of gunmetal male instantaneous inlet couplings with inbuilt non-return valve complete with cap and chain as required.	Each.	1		
		TOTAL AMOUNT OF PART - A				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		PART - B EXTERNAL FIRE PROTECTION SYSTEM				
1		Providing laying, testing & commissioning of Ductile Iron Class K-9 pipe conforming to IS:8329 including tyton gasket, nuts and bolts, gasket and etc. In ground including excavation & providing cement concrete blocks as thrust blocks/supports, refilling the trench etc. of following sizes complete as required.				
			Mtrs	650		
		(a) 150 mm dia.				
			Mtrs	33		
		(b) 100 mm dia				
2		Providing laying, testing & commissioning of Ductile Iron flanged pipe fittings conforming to IS:9523 including nuts and bolts, gasket and etc. In ground including excavation & providing cement concrete blocks as thrust blocks/supports, refilling the trench etc. of following sizes complete as required.				
		a. Flanged Socket				
		i) 150 mm dia	Nos.	30		
		ii) 100 mm dia	Nos.	4		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		b. Flanged Spigot				
		i) 150 mm dia	Nos.	30		
		ii) 100 mm dia	Nos.	4		
		c. Flanged Bend				
		i) 150 mm dia	Nos.	10		
		ii) 100 mm dia	Nos.	2		
		d. ALL Flanged Tee				
		i) 150x150x150 mm dia	Nos.	8		
		ii) 150x150x100 mm dia	Nos.	2		
		iii) 150x150x80 mm dia	Nos.	10		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		iv) 100x100x100 mm dia	Nos.	1		
		v) 100x100x80 mm dia	Nos.	1		
3		Providing laying, testing & commissioning of 'C' class heavy duty MS galvanised pipe conforming to IS 1239/3589 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. In ground including excavation & providing cement concrete blocks as supports, anticorrosive treatment with 4mm thick anti corrosive tape as per IS 10221, refilling the trench etc. of following sizes complete as required.				
		(a) 150 mm dia.	Mtrs	12		
		(b) 100 mm dia	Mtrs	6		
		(c) 80 mm dia.	Mtrs	30		
4		Supplying, fixing, testing and commissioning of Cast Iron butterfly valve PN 1.6 as per specification				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		(a) 150 mm dia	Each.	5		
		(b) 100 mm dia	Each.	1		
		(c) 80 mm dia	Each.	1		
5		Supplying and fixing Stainless steel single headed hydrant valve with instantaneous SS couplings of 63mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type-A) with blank cap and chain as required.	Each.	10		
6		Supplying and fixing 63mm dia 15mtrs long RRL hose pipe with 63 mm dia male and female SS couplings duly binded with CU/GI wire, rivets etc. conforming to IS:636 (Type-A) as required.	Each.	20		
7		Supply and fixing 63 mm dia SS branch pipe with 15 mm size nozzle conforming to IS:903 suitable for instantaneous connection to interconnect hose pipe coupling as required.	Each.	10		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
8		Supply & fixing of external standard hose cabinet fabricated out of 16SWG MS sheet with front glass doors to accommodate 2 nos of 63mm dia 15 meters long hose with couplings and one number of branch pipe.	Each.	10		
9		Supply & laying of 300 mm dia NP2 class hume pipe with collars for fire hydrant pipe line crossings roads.	Mtrs	48		
10		Construction of Brick masonry valve chamber of 1.2 m x 1.2 m x 1.52 m (LxWxD) with internal plastering and removable slab for under ground valves	Each.	4		
11		Supplying & fixing 4 way fire brigade connection of cast iron body with 4 nos of gunmetal male instantaneous inlet couplings with inbuilt non-return valve complete with cap and chain as required.	Each.	1		
		TOTAL AMOUNT OF PART - B				
		PART - "C" INTERNAL HYDRANT & FIRST-AID HOSE REEL SYSTEMS				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
1		Providing, laying, testing & commissioning of 'C' class heavy duty MS galvanised pipe conforming to IS 1239 including fittings, like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc. fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required.				
		(a) 150 mm dia	Mtrs	180		
		(b) 100 mm dia	Mtrs	165		
		(c) 80 mm dia	Mtrs	40		
		(d) 25 mm dia	Mtrs	36		
2		Supplying, fixing, testing and commissioning of Cast Iron butterfly valve PN 1.6 as per specification				
		(a) 150 mm dia	Each.	6		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		(b) 100 mm dia	Each.	5		
3		Providing, installation, testing and commissioning of Wafer type non-return valve of following sizes				
		(a) 150 mm dia	Each.	1		
		(b) 100 mm dia	Each.	5		
4		Supplying and fixing Stainless Steel hydrant valve with instantaneous SS couplings of 63mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type-A) with blank cap and chain as required.	Each.	28		
5		Supplying and fixing 63mm dia 15mtrs long RRL hose pipe with 63 mm dia male and female SS couplings duly binded with GI wire, rivets etc. conforming to IS:636 (Type-A) as required.	Each.	56		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
6		Supply and fixing 63 mm dia SS branch pipe with 20 mm size nozzle conforming to IS:903 suitable for instantaneous connection to interconnect hose pipe coupling as required.	Each.	28		
7		Supply 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:				
		a. MS fabricated hose reel drum to accommodate 20 mm dia 36 mtrs long hose with fixing bracket				
		b. 20 mm dia x 36 mtrs long water hose as per specification.				
		c. 20 mm dia gun metal nozzle				
		d. 25 mm dia gunmetal gate valve at inlet side of the hose reel drum	Set.	28		
8		Supply & fixing 1200mm x 900mm aluminium door frame with powder coating and glass door with universal key for internal wet riser shaft	Set.	28		
9		Providing, Installation, testing and commissioning of 25 mm dia gun metal air release valve	Each.	5		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
10		Providing, Installation, testing and commissioning of 25 mm dia gun metal screwed ball valves	Each	5		
		TOTAL AMOUNT OF PART - C				
		PART - "D" SPRINKLER SYSEM (HOSPITAL BLOCK)				
1		Supply, installation, testing and commissioning of 150 mm dia sprinkler alarm valve with water water gong and wet pilot trim	Each	3		
2		Supply, installation, testing of 15mm dia Gunmetal body chrome finish QB sprinklers of following types				
		a. 68 Deg. C operating temperature pendent type	Each	1200		
		b. 79 Deg.C Operating temperature Pendent type	Each	150		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		c. 79 Deg. C operating temperature Up-right type	Each	100		
		d. 68 Deg. C side wall type	Each	10		
		e. 79 Deg. C side wall type	Each	50		
		f. 114 Deg.C upright/ pendent sprinklrs	Each	20		
3		supply and fixing of Adjustable roset plate for below false ceiling sprinklers	Each	1250		
4		Supply, installation and testing of 25mm dia x 1200 long SS flexible hose for below false ceiling sprinklers	Each	1250		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
5		Providing, laying, testing & commissioning of 'C' class heavy duty MS galvanised pipe conforming to IS 1239 including fittings, like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc. fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required.				
		(a) 150 mm dia	Mtrs	180		
		(b) 100 mm dia	Mtrs	450		
		(c) 80 mm dia	Mtrs	1500		
		(d) 65 mm dia	Mtrs	1850		
		(e) 50 mm dia	Mtrs	60		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		(f) 40 mm dia	Mtrs	60		
		(g) 32 mm dia	Mtrs	650		
		(h) 25 mm dia	Mtrs	6750		
6		Supplying, fixing, testing and commissioning of Cast Iron butterfly valve PN 1.6 as per specification				
		(a) 150 mm dia	Each	3		
		(b) 100 mm dia	Each	3		
		(c) 80 mm dia	Each	15		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		(e) 50 mm dia	Each	15		
7		Providing, installation, testing and commissioning of Cast Iron 'Y' type strainer with SS mesh				
		(a) 150 mm dia	Each	3		
		(b) 100 mm dia	Each	3		
8.		Supply, fixing, testing and commissioning of sprinkler flow switch				
		a. 100 mm dia	Each	1		
		b. 80 mm dia	Each	15		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		TOTAL AMOUNT OF PART - D				
		PART -E ADDRESSABLE FIRE ALARM SYSTEM				
1		Supply, fixing, testing and commissioning of 5 Loops Addressable fire alarm panel suitable for networking with necessary loop cards, networking cards and other accessories operate on 230V AC power supply with 24V battery back up	Each.	2		
3		Supply, fixing, testing and commissioning of Addressable active repeater panel for above fire alarm panel	Each	1		
5		Supply, fixing, testing and commissioning of Addressable optical smoke detectors	Each.	11		
6		Supply, fixing, testing and commissioning of Addressable Heat Detector	Each	11		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
7		Supply, fixing, testing and commissioning of Addressable Multi detectors	Each.	453		
8		Supply, fixing, testing and commissioning of Response Indicator for the detectors installed in concealed places	Each.	32		
9		Supply, fixing, testing and commissioning of Addressable manual call points	Each.	62		
10		Supply, fixing, testing and commissioning of Addressable isolator modules (Short circuit Isolators)	Each.	42		
11		Supply, fixing, testing and commissioning of Addressable loop powered sounders	Each.	62		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
12		Supply, fixing, testing and commissioning of Addressable Monitor module	Each	15		
		Supply, fixing, testing and commissioning of Addressable Control module	Each	15		
18		Supply, laying, testing and commissioning of 2Cx1.5 Sq.mm FRLS PVC sheathed screened multi-stranded copper conductor armoured cable suitable for addressable fire alarm system	Mts	12750		
19		Laying of fire alarm cable in 25 mm dia PVC conduit pipe in slab and also fixing in walls by cutting and redoing the surface to the original finish	Mts	60		
20		Laying of fire alarm cable in 40 mm dia GI conduit pipe including excavation of trench of required depth and back filling the same to the normal surface	Mtrs	50		
		TOTAL AMOUNT OF PART - E				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		PART -F				
		FIRE EXTINGUISHERS				
		Supplying, installing and commissioning Portable Fire extinguishers of following type & capacity				
1		Carbon-di- oxide type fire extinguisher of 4.5 kgs. Capacity, C02 gas filled in brand new seamless cylinder with powder coated finish, made out of Manganese steel, with wheel type valve, discharge nozzle, bend & horn, wall mounting bracket etc. complete, conforming to IS :2878	Each	45		
2		ABC stored pressure type fire extinguisher of 6 Kgs. Capacity, with initial filling in brand new cylinder with powder coated finish, fitted with Gun metal valve, discharge hose, wall mounting bracket etc. complete conforming to IS :15683	Each	120		
4		ABC stored pressure type fire extinguisher of 9 Kgs. Capacity, with initial filling in brand new cylinder with powder coated finish, fitted with Gun metal valve, discharge hose, wall mounting bracket etc. complete conforming to IS :15683	Each	10		
5		A set 4 Nos. Fire Buckets with suitable stand made up of angle iron of size 50 mm x 50 mm x 6 mm thick with lettering etc as required (confirming to IS: 2546/1974) (for MV Panel Room only)	Each	1		
6		Fire buckets round bottom type enamel painted, white inside & Red out side and Letter "FIRE" in black	Each	4		
		TOTAL AMOUNT OF PART - F				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		PART - G SIGNAGES				
		Providing and installing in position the following type sign boards made out of 3 mm thick "Opaque" PVC foam board with computer cut, PVC non-reflective self adhesive vinyl painted foam board, complete with mirror fasteners				
1		a. Signage with printed "IN CASE OF FIRE, USE STAIRS UNLESS INSTRUCTED OTHERWISE" 11.25cm height letters in red with white back ground. The size of the board shall be 25cm x 35 cm and shall be fixed at the height of 2 mts. from finished floor near Manual Call Point	No.	15		
2		a. Signage with printed "EXIT" of suitable size as per site condition with self illumination	No.	100		
3		b. Floor identification signage (i.e. GROUND FLOOR etc.) at each stair enclosure on every floor, indicating the floor number in words, lettering size shall be 5 cm with contrasting colour from back ground. Size shall be 15cm x 30cm.	No.	40		
		TOTAL AMOUNT OF PART - G				
		SUMMARY				
		PART - A. FIRE WATER PUMPING SYSTEM				
		PART - B EXTERNAL FIRE PROTECTION SYSTEM				
		PART - "C" INTERNAL HYDRANT & FIRST-AID HOSE REEL SYSTEMS				
		PART - "D" SPRINKLER SYSEM (HOSPITAL BLOCK)				
		PART -E ADDRESSABLE FIRE ALARM SYSTEM				

Item no.	DSR	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	Code No.					
	PART -F	FIRE EXTINGUISHERS				
	PART - G	SIGNAGES				
CONNECTING CORRIDOR						
CIVIL ABSTRACT						
	2	EARTH WORK				
1	2.33	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the root				
1.1	2.33.1	Beyond 30 cm girth upto and including 60 cm girth	each	4		
1.2	2.33.2	Beyond 60 cm girth upto and including 120 cm girth	each	4		
1.3	2.33.3	Beyond 120 cm girth upto and including 240 cm girth	each	4		
2	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	2.6.1	All kinds of soil up to 1.5m depth	Cum	360		
3	2.6+2.26. 1	Do do 1.5m to 3.0m depth do do	Cum	360		
		FILLING IN SUBSTRUCTURE				
4	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc., in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering etc complete, and form uniform level for flooring concrete .	Cum	360		
5	1.1.2 (8)	Conveying from site and disposing off the excess earth as per the direction of engineer in charge.	Cum	360		
		CONCRETE WORK				
6	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All works up to plinth level.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	Cum	40		
7	4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size). (Below Flooring & Below Plint Beam)	Cum	6		
		REINFORCED CEMENT CONCRETE				
8	5.4	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using fly ash and cement content as per approved design mix and 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.				
	5.34	Extra for proving richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	5.34.1	Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).				
8.1	5.40.1	All work up to plinth level. (M25)	Cum	400		
8.2	5.40.2 +5.34.1	All work above plinth level up to floor V level (M30)	Cum	150		
8.3	5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein.				
		a) for M25	Quintal	1200		
		b) for M30	Quintal	385		
	5	FORM WORK				
9	5.9	Centering and shuttering including strutting, propping etc., and removal of form for,				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
9.1	5.9.1	Foundations, Footings, bases of columns,etc for mass concrete.	Sqm	300		
9.2	5.9.5	Lintel,beams,plinth beams,girders,bressumers and cantilevers	Sqm	700		
9.3	5.9.6	Columns and Pillars, Piers, Abutments, Posts and Struts.	Sqm	400		
10		STEEL REINFORCEMENT				
10.1	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto Plinth level.				
	5.22.6	Termo – Mechanically Treated Bars	Kgs	36000		
10.2	5.22.A.	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above Plinth level.				
	5.22.A.6	Termo – Mechanically Treated Bars	Kgs	18750		
		Aluminium Windows & Ventilators				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
11	21.1	Providing and fixing aluminum work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate z sections and other sections of approved make confirming to IS : 733 and IS : 1285 fixed with fixed with raw 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, mitered 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).				
	21.1.1	For fixed portion				
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kgs	1300		
12	21.1.2	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 PVC / neoprene gasket required (fittings shall be paid for separately)				
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kgs	1000		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
13	21.3	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).				
	21.3.2	With float glass panes of 5.5 mm thickness	Sqm	175		
14	21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piect M.S. sheet outer box with side plate etc., complete as per the direction of Engineer-in-charge.				
	21.4.1	With stainless steel cover plate	Each	4		
15	21.17	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	Kgs	1485		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
16	9.64	Providing and fixing ISI marked 85x42mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete.	Each	2		
17	9.75	Providing and fixing bright finished brass door latch with necessary screws etc. complete :				
	9.75.1	300x16x5 mm	Nos	4		
18	9.81	Providing and fixing bright finished brass handles with screws etc. complete				
	9.81.1	125 mm	Nos	8		
19	9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	Nos	10		
20	9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm) with necessary accessories and screws etc. complete.	Nos	4		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
21	9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Nos	2		
		FLOORING				
		VITRIFIED FLOOR TILES				
22	11.41	Providing and laying polished vitrified floor tile in different sizes (thickness to be specified by the manufacturer) with Acid and / or Alkali resistant tiles and water absorptions less than 0.08% and confirming to IS:15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement:4 Coard sand) including grouting the joints with white cement and matching pigments etc. complete. (Basic Rate : Rs. 110/Sqft)				
	11.41.2	Size of Tiles 60 x 60 cm	Sqm	300		
23	11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer) with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours & shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete.				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	11.46.2	Size of Tiles 60 x 60 cm	Sqm	30		
	13	FINISHING				
		External Plastering				
24	13.2.1	15mm cement plaster on the rough side of single or half brick wall of mix : 1 : 4 (1 cement : 4 fine sand)	Sqm	500		
		EXTERNAL				
25	13.45	Finishing wall with textured exterior paint of required shade:				
	13.45.1	New work (Two or more coats applied @ 3.28ltr/10 sqm)over and including base coat of water proofing cement paint applied @2.20kg/10sqm)	Sqm	500		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
26	MR	Providing and fixing of Aluminium composite panel of approved make and colour for wall cladding for straight Brick/Rcc/stone walls & coloumns/beams with necessary aluminium frame works at required level made out of 50x25x3mm C section or equalent. The panel should consist of 2.5 mm thermoplastic core of antitoxic LDPE sandwiched between 0.25 skins thick aluminium sheet making a total panel thickness of 3mm. The surfaces will be finished with PVDF based coating on topsides and service coating on reverse sides would be in polyester paint. The system shall be fixed using GI brackets, aluminium L cleats and stainless steel bolts and nuts complete with spring washer and cap nuts and all other necessary accessories, sealing shall be done using weather sealant of Dow Corning 789 with necessary rods etc.,complete..	Sqm	1000		
		STEEL WORKS				
27	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete: (OTS area)	Kgs	11000		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
28	MR	Supply, fabricating, hoisting and erecting in position hot rolled structural steel members of all type of sections of approved make for trusses, purlins, columns, canopies, lattice girders, sag rods, pipe rack, insert plates, supports for the utility pipings, electrical supports of works, etc., at all elevations, levels and heights including providing and fixing bolts, nuts, washers, angles, channels, joists of various sizes and other structural elements at all levels confirming to latest IS 2062 - Grade A & B including cutting, welding, bending to shape, bolting, cleaning the rust and scales to the satisfaction of Engineer. Rate to include cost of applying a priming coat of approved Zinc rich chromate steel primer and enamel paint required even shade of approved manufacturer and colour, cost of all materials, labourers, tools and tackles, cranes, staging and scaffolding, devices for erection, shims, non shrink grout and packing pieces which will be required for levelling of the work. The rate shall include cost of loading and unloading, transportation and all other incidental charges etc., with all leads and lifts, complete and as directed by the Engineer-in-charge at all levels.	Kgs	100000		
29	MR	Providing corrugated G.I. sheet roofing including vertical/curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces) excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm	600		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
30	MR	Supply, installation, testing and commissioning of side deck insulation for wall area exposed to sunlight, using 50mm thick TF Grade Expanded polystyrene slab of density 24 Kg/cum with all lead and lift, labour, all material, tools and plant complete etc., as per the technical specification (Refere HVAC specification)	Sqm	1000		
		CIVIL COST				
COMPOUND WALL						
CIVIL						
1	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	100 sqm	1200		
2	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
	2.6.1	All kinds of soil up to 1.5m depth	Cum	1300		
3	2.6+2.26. 1	Do do 1.5m to 3.0m do do	Cum	250		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
		FILLING IN SUBSTRUCTURE				
4	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc., in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering etc complete, and form uniform level for flooring concrete .	Cum	1400		
5	1.1.2 (8)	Conveying from site and disposing off the excess earth as per the direction of engineer in charge.	Cum	150		
		CONCRETE WORK				
6	4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size). (Below Flooring & Below Plint Beam)	Cum	115		
		SUNKEN FILLING				
		REINFORCED CEMENT CONCRETE				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
7	5.4	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using fly ash and cement content as per approved design mix and 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.				
7.1	5.40.1	i) All work up to plinth level. (M25)	Cum	120		
7.2	5.40.2	ii) All work above plinth level up to floor V level (M25)	Cum	30		
7.3	5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein.				
		a) for M25	Quintal	90		
	5	FORM WORK				

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
8	5.9	Centering and shuttering including strutting, propping etc., and removal of form for,				
8.1	5.9.1	Foundations, Footings, bases of columns,etc for mass concrete.	Sqm	500		
8.2	5.9.5	Lintel,beams,plinth beams,girders,bressumers and cantilevers	Sqm	450		
8.3	5.9.6	Columns and Pillars, Piers, Abutments, Posts and Struts.	Sqm	470		
		STEEL REINFORCEMENT				
9	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto Plinth level.				
	5.22.6	Termo – Mechanically Treated Bars	Kgs	13200		
10	5.22.A.	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above Plinth level.				
	5.22.A.6	Termo – Mechanically Treated Bars	Kgs	3750		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
	6	BRICK & STONE WORK				
11	6.4	Brick work with F.P.S bricks of class designation 7.5 in superstructure above plinth level up to floor v level in all shapes an sizes in:				
	6.4.2	Cement mortar 1: 6 (1 cement :6 coarse sand)	Cum	200		
	13	FINISHING				
		External Plastering				
12	13.2.1	15mm cement plaster on the rough side of single or half brick wall of mix : 1 : 4 (1 cement : 4 fine sand)	Sqm	2100		
		WALL FINISHES				
		EXTERNAL				
13	13.45	Finishing wall with textured exterior paint of required shade:				
	13.45.1	New work (Two or more coats applied @ 3.28ltr/10 sqm)over and including base coat of water proofing cement paint applied @2.20kg/10sqm)	Sqm	2100		
14	9.48	Providing and fixing M.S. grills of required patern in frames of windows etc. with M.S. flats square or round bars etc . Including priming coat with approved steel primer all complete				
	9.48.2	Fixed to openings with rawl plugs screws etc.	Kgs	14000		

Item no.	DSR Code No.	Item Description	Unit	Quantity	Rate (Rs. in fig & words)	Amount (Rs. in fig & words)
15	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-charge.	Cum	20		
16	15.9	Demolishing stone rubble masonry/ Brick Masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge:				
	15.9.2	In cement mortar	Cum	375		
		CIVIL COST				