	INDIRA GANDHI INSTITUTE OF I	MEDICAL SCIENC	CES, PATN	A-14		
	FINANCIAL BID SHI					
	Tender Notice No.Engg/9	9/CEE/E-Tender	/2016-17			
SI. No.	Name of the Work :- Construction of State Cancer Institute Building along with supply, Installation, commissioning and maintenance of various Biomedical Equipments at IGIMS Campus Patna.					
1	Estimated Cost (In Rs.)		:-		12000,00,000.00	
2	Earnest Money (in Rs)		:-		130,00,000.00	
3	Cost of B.O.Q. (In RS)		:- 35,000			
4	E-tendering fee (Non Refundable) (In Rs)		:- 17,2			
5	Time of completion (In months)		:- 18 n			
6	Date/ time for obtaining BOQ (Only on www.eproc.bihar.gov.in)		03.	.10.2016 to 28.10.2016	6 till 3.00 PM	
7	Date and place of pre bid meeting		15.10.2016 at 3	.30 PM in Conference Patna.	hall of IGIMS	
8	Last date for correction in Tender document if required :		(0	20.10.2016 Only on www.eproc.b	ihar.gov.in)	
9	Last Date/ time for submission of completed tender :		Docum	01.11.2016 till 04. ents (only on www.ep		
10	Date/ place of opening of tender (Technical bid only on www.eproc.bihar.gov.in) :		in	03.11.2016 at 03.30 PM in Conference hall of IGIMS Patna.		
11	Date/ place of opening of tender (Financial bid only on www.eproc.bihar.gov.in)		After evaluation of technical Bid, date and time will be announced and uploaded on website- www.eproc.bihar.gov.in and www.igims.org only. No individual letter shall be sent to participating bidders. Place (in Conference hall of IGIMS Patna.)			
S.No	Description of Items	Qty.	Unit	Rate	Amount	

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	GROUP-(A) CIVIL, ELECT	RICAL A	ND HVAC	·	
	CIVIL WORK				
	EARTH WORK				
1	Earth work in excavation over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 sum on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed:				
	All kinds of soil	2525.00	Cum	200.70	5,06,768.00
2	Earth work in excavation foundation trenches or drains (not exceeding 1.5 m in width or 10 sum on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	All kinds of soil.	138.00	Cum	205.20	28,318.00
3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	789.00	oum.	66.40	52 200 00
	and watering, lead up to 30 m and int upto 1.5 m.	789.00	cum	00.40	52,390.00
4	Supplying and filling in plinth with Local sand under floors including, watering, ramming consolidating and dressing complete.	3882.00	cum	192.50	7,47,285.00
5	Extra for every additional lift of 1.5 m or part thereof in.				
	All kinds of soil.	252.50	cum	26.10	6,590.00
6	Supplying chemical emulsion in sealed containers including delivery as specified.				
	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	225.00	lit	201.60	45,360.00
	CONCRETE WORK				
6	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level :				
	1.4.8 (1 Cement :4 coarse sand :8 graded stone agregate 40 mm nominal size)	378	cum	2346.90	8,87,128.00
	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters ,columns ,piers, abutments,pillars,post.struts,buttresses, string or lacing courses,parapets, coping,bed blocks, anchor blocks, plin window sills, fillets etc. upt floor five level excluding the cost of centring,shuttering and finishing:				
	1:2:4 (1 Cement :2 coarse sand :4 graded stone aggregate 20 mm nominal size)	4.00	Cum	3991.90	15,968.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
7	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement				
	: 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	215.00	sqm	218.10	46,892.00
8	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.	69.00	per 50 kg cement	48.07	3,317.00
9	Applying a coat of residual petroleum bitumen of grade of VG10 of approved quality using 1.7 kg. per square metre on damp oroof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil. MISCELLANEOUS	215.00	sqm	107.00	23,005.00
10	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	302.00	sqm	319.30	96,428.00
	and sairs, moderning missining are top emocal.	302.00	Sqiii	319.30	90,428.00
	REINFORCED CEMENT CONCRETE				
11	Centring and shuttering including strutting, propping etc. and removal of form for :				
	Foundations, footings, bases of columns, etc. for mass concrete.	2843.00	sqm	166.70	4,73,928.00
	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.				
		2086.00	sqm	248.10	5,17,537.00
	Suspended floors, roofs, landings, balconies and access platform.	6605.00	sqm	275.60	18,20,338.00
	Shelves (Cast in situ)	26.00	sqm	275.50	7,163.00
	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	6268.00	sqm	251.30	15,75,148.00
	Columns, Pillars, Piers, Abutments, Posts and Struts.	3852.00	sqm	344.40	13,26,629.00
	Stairs, (excluding landings) except spiral-staircases. Extra for shuttering in circular work (20% of respective centring and shuttering items).	240.00	sqm	321.50	77,160.00
	Coloumns	192.60	sqm	69.57	13,399.00
	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like.	353.00	sqm	181.30	63,999.00
	Edges of slabs and breaks in floors and walls.				
	Under 20 cm wide	1199.00	metre	80.90	96,999.00
	Weather shade, Chajjas, corbels etc., including edges.	75.00	sqm	385.80	28,935.00
12	Extra for additional height in centring, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentring at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured)				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).				
		6863.00	sqm	105.50	7,24,047.00
40					
13	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand : 4 graded stone				
	aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centring				
	and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits.				
	line sand) etc. complete excluding plastering of the jambs, sills and somts.				
	50 mm thick	250.00	sqm	548.80	1,37,200.00
14	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position				
14	and binding all complete.				
	TMT bars TMTC-500- 8 mm dia	105546.00	kg	74.40	78,52,622.00
	TMT bars TMTC-500- 10 mm dia	87955.00	kg	73.10	64,29,511.00
	TMT bars TMTC-500- 12mm dia	87955.00	kg	71.80	63,15,169.00
	TMT bars TMT FE-500-16 mm dia	175910.00	kg	72.80	128,06,248.00
	TMT bars TMT FE-500-20/25/28/32 mm dia	422183.00	kg	72.20	304,81,613.00
15	Description and fining about according a companion in interview in a companion to				
15	Providing and fixing sheet covering over expansion joints with iron screws as per design to match the colour / shade of wall treatment.				
	Aluminium fluted strips 3.15mm thick.				
	200 mm wide.	79.00	metre	459.70	36,316.00
	200 Hill Wide.	79.00	mene	439.70	30,310.00
16	Providing and laying in position machine batched and machine mixed design mix M-25				
	grade cement concrete for reinforced cement concrete work, using cementcontent as per				
	approved design mix, including pumping of concrete to site of laying but excluding the cost				
	of centering, shuttering, finishing and including retard setting of concrete, improve				
	workability without impairing strength andadmixtures in recommended proportions as per				
	IS: 9103 to accelerate, reinforcement, durability as per direction of Engineer-incharge. Note:-				
	Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as				
	per design mix is payable or recoverable separately.				
	All works up to plinth level	1712.00	cum	4066.60	69,62,019.00
17	All work above Plinth level upto floor V Level.	3366.00	cum	4494.50	151,28,487.00
18	Add or deduct for providing richer or leaner mixes respectively at all floor levels.				_
10	Providing M-30 grade concrete by using 400kg of Cement per cum of concrete instead of				
	M-25 grade B.M.C./RMC.	2199.00	cum	63.60	1,39,856.00
19	Providing M-35 grade concrete by using 420kg of cement per cum of concrete instead of M-				
	25 grade B.M.C./R.M.C	726.00	cum	127.30	92,420.00
20	Add for using extra cement in the items of design mix over and above the				
	specified cement content therein.	2925.00	Qtl	588.00	17,19,900.00
	op come content dentent dielem	_5_5.55	~	555.00	,.0,000.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
21	Providing and fixing of expansion joint system related with floor location as per drawings and direction of Engineer-In-Charge. The joints system will be of extruded aluminum base members, self aligning / self centering arrangement and support plates etc. as per ASTM B221-02. The system shall be such that it provides floor to floor /floor to wall expansion control system for various vertical localtion in load application areas that accommodates multi directional seismic movement without stress to it's components. System shall consist of metal profiles with a universal aluminum base member designed to accommodate various project conditions and finish floor treatments. The cover plate shall be designed of width and thickness required to satisfy projects movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered selfcentering arrangement that freely rotates / moves in all directions. The Self – centering arrangement shall exhibit circular sphere ends that lock				
	Floor Joint of 100 mm gap.	79.00	metre	6813.00	5,38,227.00
22	Providing and fixing of expansion joint system related with wall joint (internal/external) location as per drawings and direction of Engineer-InCharge. The joints shall be of extruded aluminum base members, self aligning / centering arrangement and support plates as per ASTM B22102. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall/ wall to corner application, both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System shall utilize light weight aluminum profiles exhibiting minimal exposed aluminum surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall confirm to ASTM 6063).				
	Wall Joint of 100 mm gap.	65.00	metre	5427.70	3,52,801.00
23	Providing and fixing of expansion joint system of approved make and manufactures for various roof locations as per approved drawings and direction of Engineer-In-Charge. The joints shall be of extruded aluminum base members with, self aligning and self centering arragement support plates asper ASTM B221-02. The system shall be such that it provides watertight roof to roof/roof to corner joint cover expansion control system that is capable of accommodating multidirectional seismic movement without stress to its components. System shall consist of metal profile that incorporates a universal aluminum base member designed to accommodate various project conditions and roof treatments. The cover plate shall be designed of width and thickness required to satisfy movement and loading requirements and secured to base members by utilizing manufacturer's preengineered self-centering arrangement that freely rotates / moves in all directions. The Self centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminum extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. The Joint System shall resists damage or deterioration from the impact of falling ice, exposure to UV, airborne contaminants and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in the Joint				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Roof Joint of 100 mm gap.	40.00	metre	6425.00	2,57,000.00
	BRICK WORK (A)				
24	Brick work with fly ash bricks as per IS 12894(2002) & IS 3495 in foundations and plinth in :				
	Cement mortar 1:6 (1 cement: 6 coarse sand)	1704.00	Cum	4802.10	81,82,778.00
25	Extra tor Brick work in superstructure above plinth level upto floor V cum	1704.00	Cum	434.60	7,40,558.00
26	Half brick masonry with brick of class designation 100A in foundations and plinth in :				
	cement mortar 1:4 (1 cement : 4 coarse sand)	4059.00	sqm	490.80	19,92,157.00
27	Extra for half brick masonry in superstructure, above plinth level upto floor V level	4059.00	sqm	47.50	1,92,803.00
28	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry (with F.P.S. bricks).	4059.00	sqm	75.90	3,08,078.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
	MARBLE WORK				
29	Providing and fixing 20mm thick mirror polished 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 edge to give high gloss finish etc. complete at all levels.				
	Granite black stone				
	Area of slab each slab over 0.2 sqm but upto 0.5 sqm Granite of any colour and shade	24.00	sqm	3319.10	79,658.00
30	Extra for providing edge moulding to 18mm thick marble stone counters, Vanities etc. over item no. 8.2 including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				
	Granite work.	47.00	metre	239.10	11,238.00
31	Extra for fixing marble /granite stone over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based (Araldite or equivalent) adhesive including cleaning etc. complete.	43.00	metre	135.20	5,814.00
32	Extra for providing opening of required size & shape for wash basins/ kitchen sink in kitchen platform, vanity counters and similar location in marble/Granite/stone work including necessary holes for pillar taps etc. including rubbing and polishing of cut edges etc. complete.	46.00	opening	21.30	980.00
	WOOD WORK				
33	Providing and fixing flush door shutters non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters :				
	35 mm thick including anodised alumunium butt hinges with necessary screws.	348.00	sqm	1823.80	6,34,682.00
34	Extra for cutting rebate in flush door shutters {total area of the shutter to be measured)	348.00	sqm	107.00	37,236.00
35	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. all complete.				

S.No	Description of Items	Qty.	Unit	Rate	Amount
36	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S including cost of adhesive of approved quality.				
	1.0 mm thick.	696.00	sqm	829.70	5,77,471.00
37	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ±1mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineerin-charge				
	Extruded section profile size 42x50 mm	215.00	metre	202.15	43,462.25
38	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 inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm (± 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised 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 bathroom door shutter)	67.73	sqm	2718.60	1,84,117.19
39	Providing and fixing IS: 3564 bright finished brass hydraulic door closer with necessary accessories and screws etc. complete.	105.00	each	756.10	79,391.00
40	Providing and fixing aluminium sliding door bolts anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete:				
	300x16 mm	58.00	each	222.70	12,917.00
	250x16 mm	128.00	each	184.90	23,667.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
41	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 :				
	300x10 mm	226.00	each	114.10	25,787.00
	150x10 mm	226.00	each	66.00	14,916.00
	100x10 mm	115.00	each	52.10	5,992.00
42	Providing and fixing aluminium handles 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 :				
	125 mm	221.00	each	71.00	15,691.00
	100 mm	115.00	each	55.80	6,417.00
	STEEL WORK				
43	Structural steel work in singal section fixed without connecting plate including cutting.hoisting,fixing in position and applying a priming coat of approved steel primer all complete.	1500.00	kg	69.80	1,04,700.00
			9		.,0.,,,.00.00
44	Providing and fixing in position collapsible steel shutters with vertical channes 20x10x2 mm and braced with flat iron diagonals 20x5 mm size with top and bottom rail of T-tron 40x40x6 mm with 40 mm dia steel pulleys complete with bots.nuts locking arrangement stoppers handies including applying a priming coat of approved steel primer.				
		70.00	Sqm	4115.6	2,88,092.00
45	Providing and fixing circular cast iron box for ceiling fan clamp of internal dia 140mm,				
	73mm height, top lid of 1.5mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron by means of 3.3mm dia. round headed screws, one lock at the corners. Clamp shall be made of 12mm dia M.S. bar bent to shape as per standard drawing.	367.00	each	137.90	50,609,00
	as per standard drawing.	307.00	each	137.90	50,609.00
46	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
	In stringers, treads landings etc. of stair cases including	1000.00		75.00	4 40 === 00
	use of required plates wherever required all complete.	1989.00	kg	75.30	1,49,772.00
	In gratings, frames, guard bar, ladders, railings, brackts. gates & similar works.	1500.00	kg	82.00	1,23,000.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
47	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing	J			
	accessories such as nuts, bolts, fasteners etc.).	1537.00	Kg	638.80	9,81,835.60
	FLOORING				
	I LOOKING				
48	Cement concrete flooring 1:2:4(1 cement:2 coarse:sand:4 graded stone agregate) finished with a floating coat of neat cement including cement slurry, etc. but excluding the cost of nosing of steps etc. complete.				
	40 mm thick with 20 mm nominal size stone aggregate	396.00	sqm	212.80	84,269.00
49	Providing and fixing glass strips in joints of terrazo/cement concrete floors.				
	40 mm wide and 4 mm thick	1069.00	metre	27.50	29,398.00
50	Chequered terrazo tiles 22 mm thick with marble chips of size up to 6 mm in floors jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand):				
	Light shade using white cement.	656.00	sqm	892.90	5,85,742.00
51	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sum including pointing in white cement mixed with pigment of matching shade complete.				
		1499.00	sqm	754.20	11,30,546.00
52	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 Cement: 4 Coarse sand) including pointing the joints with white cement and				
	matching pigments etc., complete.	453.00	sqm	801.80	3,63,215.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
53	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete.				
	Size of Tile 60x60 cm	3689.00	sqm	788.60	29,09,145.00
54	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
	20 to 25 mm thick	960.00	sqm	968.00	9,29,280.00
55	Kota stone slabs 25 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	318.00	aam	927.50	2.04.045.00
	complete.	310.00	sqm	927.50	2,94,945.00
56	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.				
	Size of Tile 600x600 mm	344.00	sqm	1415.9	4,87,070.00
57	Providing designation 100 A one brick flat soling joints filled with local sand including cost of watering, taxes, royalty all complete as per building specification and direction of E/I,	585.00	sqm	227.6	1,33,146.00
58	Providing designation 100 A one brick on edge soling joints filled with local sand including cost of watering, taxes, royalty all complete as per building specification and direction of E/I,	415.00	sqm	365.1	1,51,516.50
	ROOFING				
59	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
	In 75x75mm deep chase	415.04	metre	83.80	34,780.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
60	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge sand making and finishing the outlet complete.	26.00	azeh	141.50	2 670 00
	complete.	20.00	each	141.50	3,679.00
61	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint all complete for all heights. GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both				
	sides inclusive) and electro statically polyester powder coated of thickness 60 microns				
	(minimum), including factory painted after bending.	423.00	sqm	1551.55	6,56,306.00
62	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture spintone/ cosmos / Hexa or equivalent of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle precoated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture (Spintone / Cosmos/hexa) in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners. 4 mm G.I. adjustable				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Note:- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.30 sqm.The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%, noncombustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/m 0 KC.	·			
		423.00	sqm	1649.15	6,97,590.00
63	Providing and fixing at all height false ceiling of 12.5 mm thick -tapered edge gypsum board conforming to IS: 2095 including -providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanized in accordance with zinc coating 600 as per IS: 277 and consisting of angle cleats of size 25 mm wide x 16 mm thick with flanges of 22 mm and 27 mm at 1200 mm centre to centre one flange fixed to the ceiling with dash fastener 12.5 mm dia x 40 mm long with 6 mm dia bots to the angle hangers of 25x25x5 mm of required length, and other end of angle hanger being fixed with nut and bots to 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 clips of 10.5 mm at 450 mm centre to centre shall be be fixed in a direction perpendicular to G. I. channel with connecting clips made out of 2.64 mm dia x 230 mm long G. I. wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long. the perimeter of ceiling fixed to wall / partition with the help of rawl plugs at 450 mm centre to centre with 25 mm long dirve-all screws @ 230 mm interval including iointing and fixing to a flush of tapered and square	845.00	each	765.50	6,46,848.00
	FINISHING				
64	10 mm coment plactor of mix.				
04	12 mm cement plaster of mix : 1:6 (1 cement : 6 coarse sand)	8095.00	sqm	89.30	7,22,884.00
65	15 mm cement plaster on rough side of single or half brick wall of mix : 1:6 (1 cement : 6 coarse sand)	8095.00	sqm	103.20	8,35,404.00
66	18 mm cement plaster in two coat under layer 12 mm thick cement plaster 1:5 (1 cement: 5 course sand) and a top layer 6mm thick cement plaster 1:3(1 cement: 3 coarse sand finiished rough with sponge	5418.00	sqm	138.90	7,52,560.00
67	6 mm cement plaster of mix :				
	1:3 (1 cement : 3 coarse sand)	3552.00	sqm	82.90	2,94,461.00
68	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	2286.15	sqm	27.50	62,869.00
69	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	19741.00	sqm	76.80	15,16,109.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
70	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade				
	New work (two or more coats) over and including priming coat with cement primer.	3552.00	sqm	64.00	2,27,328.00
71	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:				
	Two or more coats on new work	16189.00	sqm	56.80	9,19,535.00
72	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:				
	Two or more coats on new work	203.00	sqm	50.90	10,333.00
73	Forming groove of uniform size from 12x12mm and upto 25x15mm in plastered surface as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repairs to the edges of plaster panel and finishing the groove complete as per specifications and direction of the Engineer-in-Charge.	3328.00	metre	32.70	1,08,826.00
74	Finishing walls with textured exterior paint of required shade :				
	New work (Two or more coats applied @ 3.28 ltr/ 10 sqm) over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm	3969.00	sqm	122.00	4,84,218.00
75	Finishing walls with Acrylic Smooth exterior paint of required shade :				
	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)	1701.00	sqm	68.8	1,17,029.00
76	Varnishing with varnish of approved brand and manufacture:				
	Two or more coats of glue sizing with copal varnish over an under coat of flatting varnish.	125.00	sqm	72.7	9,087.50
	ROAD WORK				
77	Cement Concrete Pavement (Construction of un-reinforced, dowl jointed, plain cement concrete pavement over a prepared sob base with 43 grade @400 kg per cum., coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25mm, mixed in a batching and mixing plant as per approved mix design transported to site, laid with a fixed form or slip form paver, spread, comacted and mixing finished in a continuous operation, including provision of contraction, expension, construction & longitudinal joints, joints Filler, sepration membrane, sealant primer, joint sealent, debonding, strip, dowel bar, tie rod, admixtures as approved curing compound, finishing to lines and grades as per drawing)	360.00	cum	4882.00	17,57,520.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
78	Cast in Situ cement concrete M-20 kerb with channel (construction of cement concrete kerb with channel top and bottom width 115 and 165 mm respectively, 250mm high in m-20 grade PCC on m-10 grade foundation 150mm thick, kerb channel 300mm wide, 50mm in PCC M-20 grade, sloped towards the kerb, kerb stone with channel laid with kerb lying machine, foundation concrete laid manually, all complete as per clause 408).				
	Using concrete batching and mixing plant	600.00	Rmt	280.00	1,68,000.00
79	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, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of fine sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	1050.00	sqm	602.2	6,32,310.00
	PILE WORK				
80	Boring, Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap):				
	400 mm dia piles	5780.00	metre	2,225.30	128,62,234.00
81	Extra over item No. 23.3 for providing additional bulb in under reamed piles, under specified dia meter (Only the quantity of extra bulbs are to be paid).				
	400mm dia piles.	578.00	Each	1,373.80	7,94,056.00
82	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.				
	Single pile upto 50 tonne capacity				
	Initial test	1.00	per test	41,809.50	41,810.00
	Group of two or more piles upto 50 tonne capacity				
	Routine test	4.00	per test	37,150.00	1,48,600.00
83	Lateral load testing of single pile in accordance with IS Code of practice IS: 2911 (Part IV) for determining safe allowable lateral load on pile:				
	Upto 50 tonne capacity pile.	1.00	per test	18889.80	18,890.00
	ALUMINIUM WORK				

S.No	Description of Items	Qty.	Unit	Rate	Amount
84	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-incharge. (Glazing, paneling and dash fasteners to be paid for separately):				
	For fixed portion				
	Powder coated aluminium (minimum thickness of powder coating 50 micron)	6908.00	kg	386.60	26,70,633.00
85	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).		···g	333.00	
	Powder coated aluminium (minimum thickness of powder coating 50 micron)	1398.00	kg	433.00	6,05,334.00
86	Providing and fixing 12mm thick Pre-laminated three layer medium density (exterior grade) particle board conforming to IS: 12823 Grade I Type II bonded with phenol formaldhyde synthetic resin, of approved brand and manufacturere 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.				
	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side.	37.00	sqm	1055.50	39,054.00
87	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item) :				
	With float glass panes of 5.50 mm thickness(weight not less than 13.75 kg/sqm)	149.00	sqm	1013.20	1,50,967.00
88	Providing and fixing double action hydraulic floor spring of approved brand and manufacture (confirming to IS: 6315) for alumunium doors including cost of cutting floors as required, embedding in floors and cover plates etc. complete as per the direction of Engineer-in-charge.		·		
	With stainless steel cover plate minimum 1.25 mm thickness	16.00	each	2125.70	34,011.00
89	Filling the gap in between aluminium frame & adjacent RCC/ Brick/Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-incharge complete.				
-	Upto 5mm depth and 5 mm width	2179.95	metre	89.90	1,95,978.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
90	Providing and fixing aluminium tubular handle bar 32 mm outer dia,3.0 mm thick & 2100				
	mm long with SS screws etc .complete as per direction of Engineer-in- Charge				
	Powder coated minimum thickness 50 micron aluminium tubular handle bar	2.00	Each	548.20	1,096.00
	Providing and fixing anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868. Minimum anodic coating of grade AC 15) sub frame work for windows and ventilators with extruded built up standard tubular sections of approved make conforming to IS: 733 and IS: 1285, fixed with dash fastener of required dia and size (Dash fastener to be paid for separately).				
		2724.94	Kg	332.40	9,05,769.00
	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-incharge. (Only weight of grill to be easured for payment).				
		335.61	Kg	413.50	1,38,773.00
	WATER PROOFING				
	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C. kitchen and the like consisting of: (i) 1st course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions.(ii) 11 nd course of 20 mm cement plaster 1:3 (1 cement:3 coarse sand)mixed with water proofing compound in recommended proportion, (iii) Illrd course of applying blown or/residual bitumen aplied hot at 1.7 kg. per sqm of area, (iv) lvth course of 400 micron thick PVC sheet.(Overlaps at joints of PVC shet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqni).				
		354.00	sqm	358.60	1.26.944.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
94	Providing and laying integral cement based for water proofing treatment including preparation of surfaces as required for treatment of roofs, balconies, terraces etc. consisting of following operations: a) Applying and grouting a slurry coat of neat cement using 2.75 kg/per sqm of cement admixed with proprietory water proofing compound cleaning surfaces before treatment, b) Laying cement concrete using broken bricks / brick bats 25 mm to 100 mm size with 50% of cement mortar 1:5 (1 cement: 5 course sand) admixed with proprietory water proofing compound confirming to IS:2645 over 20 mm thick of layer of cement mortar of mix 1:5 (1 cement: 5 corse sand) admixed with proprietory water proofing compound confirming to IS:2645 to required slop and trating similarly the adjoining to walls upto 300 mm height including rounding of junction of wall and slab. c) After 2 days of proper curing applying a second coat of cement slurry admixed with proprietory water proofing compound to confirming to IS:2645 and finishing the				
	surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement: 4 coarse sand) admixed with proprietory water proofing compound confiring to IS:2645 and finally finishing the surface with towel with neat cement slurry and making of 300 x 300 mm square. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test, All above operations to be done in order as directed and specified by E/I.				
	With average thickness of 120 mm and minimum thickness at khurras point to be 65.	2012.00	sqm	623.70	12,54,884.00
	Structural Glazing and Aluminium Composite Panel				
95	Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings, the aluminium quality as per grade 6063 T5 or T6 as per BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. (The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account).	4013.00	kg	366.7	14,71,567.00
96	Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including:				
	Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation & drainage and protection against fire hazard including:				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Fabricating and supplying serrated M.S. hot dip galvanised / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimentional				
	movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor				
	fasteners/ bolts, nylon seperator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.				
	Providing and filling, two part pump filled, structural silicone sealant and one part weather				
	silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment , including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass.				
	Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.				
	Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, nstallation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item				
	also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings as per the description as specified as per the approved shop.				
	Note:- 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this subhead. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves) on the external face shall be measured in sqm. up to two				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Note:-2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accreditated by NABL(National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Cost of testing is payable separately. The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NBL Certified laboratories	-			
	Performance Laboratory Test for Air Leakage Test (-50pa to - 300pa) & (+50pa to +300pa) as per ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr"				
	Static Water Penetration Test. (50pa to 1500pa) as per ASTME- 33109 testing method for a range up to 2000 ml."				
	Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01- 05 testing method for a range upto 2000 ml"				
	Structural Performance Deflection and deformation by static air pressure test (1.5 times desing wind pressure without any failure) as per ASTME330-10 testing method for a range upto 50 mm"				
	Seismic Movement Test (upto 30 mm) as per AAMA 501.4-09 testing method for Qualitative test" Tests to be conducted on site 6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000ml"	703.00	sqm	2670.2	18,77,151.00
	Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthned clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. (Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.26.2) For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm.				
	(i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.				
		703.00	sqm	4279.5	30,08,489.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
98	Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineerin- Charge.	176.00	sqm	3286.2	5,78,371.00
99	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building, for all heights and all levels etc. including:				
	a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design.				
	b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metalic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc.				
	c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium items. The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places.		sqm	4003.2	1,28,102.00
	CARRIAGE OF MATERIAL				
100	Stone chips (185 km from Kodarma) Coarse Sand (50 km from Koelwar)	5062.83 5470.48	Cum Cum	2018.12 690.74	102,17,394.00 37,78,680.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Bricks 8 KM from Bankghat	1073139.00	Per 1000 Nos	601.67	6,45,676.00
	Steel (5 KM)	879.55	MT	289.87	2,54,955.00
	Cement (5 KM)	2303.88	MT	289.87	6,67,825.00
	Local sand (3km 1k + 2p)	3882.00	Cum	205.29	7,96,936.00
101	Extra cost of material				, ,
	Bricks	1073139.00	Per 1000 Nos.	1473.55	15,81,324.00
	Cement	2303.88	MT	798.89	18,40,545.00
A.	SUB HEAD - I : SANITARY FIXTURES				
100					
102	Providing and fixing water closet squatting pan (Indian type W.C.pan) with 100 mm sand cast Iron P or S trap, 10 litre low fixtures complete, including cutting and making good the walls andlevel white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and floors wherever required:				
	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot				
	rests	22	Each	3035.4	66,779.00
103	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm 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:				
	W.C. pan with ISI marked white solid plastic seat	36	Each	4470.3	1,60,931.00
	Prior pair that for markou winto colla piacito coat	00	Luon	1170.0	1,00,001.00
104	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar				
	taps	76	Each	2120.3	1,61,143.00
105	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm,including painting of fittings and brackets, cutting and making good the walls wherever required:				
	Kitchen sink without drain board				
	610x510 mm bowl depth 200 mm	1	Each	4497.9	4,498.00
106	Providing & fixing C.P. brass bib cock of approved quality conforming to IS :8931.				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	15 mm nominal bore	61	Each	497.00	30,317.00
107	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
	15 mm nominal bore	48	Each	660.60	31,709.00
108	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore				
	15 mm nominal bore	236	Each	549.30	1,29,635.00
109	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.	1000	Per Litre	6.80	6,800.00
	C.P. Brass Fittings				
110	Providing and fixing PTMT liquid soap container 109 mm wide,125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	76	Each	197	14,972.00
111	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.				
	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms	24	Each	418.20	10,037.00
112	Providing and fixing PTMT soap Dish Holder having length of 138mm,breadth 102mm, height of 75mm with concealed fitting arrangements,weighing not less than 106 gms.	24	Each	165.60	3,974.00
			Lacii	100.00	0,01 1.00
113	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required:				
	Size 600x450x200 mm	9	Each	3046.00	27,414.00
114	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	76	Each	694.40	52,774.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
115	Providing & fixing toilet paper holder:				
	C.P.brass	61	Each	318.10	19,404.00
116	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.				
		21	Each	17908.30	3,76,074.00
117	Providing and fixing stone slab with 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.				
	White Agaria Marble Stone.	21	Sqm	3263.5	68,534.00
118	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.				
	15 mm nominal bore with 30cm length	236	Each	66.40	15,670.00
119	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :				
	100 mm diameter	24	Each	77.4	1,858.00
120	Providing and fixing PTMT angle stop cock 15 mm nominal bore,weighing not less than 85 gms	24	Each	180.9	4,342.00
121	Providing and fixing PTMT swivelling shower, 15 mm nominal bore, weighing not less than 40 gms	24	Each	124.00	2,976.00
122	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.				
		3	Each	10248.9	30,747.00
B.	SUB HEAD - II : INTERNAL DRAINAGE (RAINWATER , SOIL, WASTE & FITTINGS)				

S.No	Description of Items	Qty.	Unit	Rate	Amount
123	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 mx1 mx400 micron, finished 12 mm cement plaster 1:3 (1 cement:3 coarse sand)				
	and a coat of neat cement rounding the edges and making and finishing the outlet				
	complete	16	Each	141.5	2,264.00
124	Providing and laying in position cement concrete of specified grade excludingthe cost of centring and shuttering - work upto plinth level				
	1:2:4 (1cement : 2 Coarse sand : 4 graded stone aggregate 20 mm nominal size)	40	Cum	3323.1	1,32,924.00
125	Providing and fixing PTMT grating of approved quality and colour.				
	Circular type				
	100 mm nominal dia	125	Each	47.90	5,988.00
126	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				
	Bottle t rap 31mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms	76	Each	442.50	33.630.00
	Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 263 gms				·
	Sear, weighing not less than 203 gms	31	Each	477.80	14,812.00
127	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:				
	150 x 100 mm size P type				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	18	Each	1368.8	24,638.00
128	Constructing brick masonry manhole in cement mortar 1:4(1 cement : 4 coarse sand)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 40 mm nominal size) inside plastering 12 mm 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 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design:				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Inside size 90x80 cm and 45 cm deep including C.I.cover with frame (light duty) 455x610 mm internal diameter, total weight of cover and frame to be not less than 38 kg (weight of cover 23kg and weight of frame 15 kg):				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	25	Each	6641.8	1,66,045.00
129	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	16	Each	3117.3	49,877.00
C.	SUB HEAD - III : INTERNAL WATER SUPPLY				
130	Providing & Fixing G.I. Pipes complete with G.I.Fittings including trenching and refilling etc. (external work)				
	32 mm dia nominal bore	30	Mtrs.	271.30	8,139.00
	50 mm dia nominal bore	35	Mtrs.	397.00	13,895.00
131	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Concealed work, including cutting chases and making good the walls etc.				
	15 mm nominal outer dia Pipes	620	Mtrs.	241.00	1,49,420.00
	20 mm nominal outer dia Pipes	385	Mtrs.	269.60	1,03,796.00
	25 mm nominal outer dia Pipes	130	Mtrs.	329.10	42,783.00
	32 mm nominal outer dia Pipes	15	Mtrs.	406.30	6,095.00
132	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps,including cutting and making good the walls etc				
	Internal work - Exposed on wall				
	20 mm dia nominal bore	250	Mtrs.	207.3	51,825.00
	25 mm dia nominal bore	155	Mtrs.	270.2	41,881.00
	32 mm dia nominal bore	60	Mtrs.	320.6	19,236.00
	40 mm dia nominal bore	50	Mtrs.	395.5	19,775.00
	50 mm dia nominal bore	255	Mtrs.	491.1	1,25,231.00

	Description of Items	Qty.	Unit	Rate	Amount
	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1				
	cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160				
	mm bottom diameter and 180 mm deep (inside) with				
	chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone				
	aggregate 20mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10(1 cement : 5 fine sand : 10 graded stone aggregate 40 mm				
	nominalsize) and inside plastering with cement mortar 1:3 (1 cement : 3coarse sand) 12				
	mm thick, finished with a floating coat of neat cement complete as per standard design :				
	With common burnt clay F.P.S.(non modular) bricks of class designation 100A	2	EACH	5477.70	10,955.00
	With Common burnt clay 1.1.3.(northiodular) blicks of class designation 100A		LAOTI	3411.10	10,933.00
134	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work :				
	20 mm diameter pipe	250	Mtrs.	9.00	2,250.00
	25 mm diameter pipe	155	Mtrs.	12.00	1,860.00
	32 mm diameter pipe	60	Mtrs.	14.00	840.00
	40 mm diameter pipe	50	Mtrs.	16.70	835.00
	50 mm diameter pipe	255	Mtrs.	19.40	4,947.00
135	Painting G.I. pipes and fittings with two coats of anticorrosive bitumastic paint of approved				
	quality.				
	32 mm diameter pipe	30	Mtrs.	7.50	225.00
	50 mm diameter pipe	35	Mtrs.	10.00	350.00
	TOTAL AMOUNT OF CIVIL & PHE WORK				4000 00 005 04
	ELECTRICAL WORK				1802,98,905.04
	LLLCTRICAL WORK				
A.	CIRCUIT CUM POINT WIRING				
136	Point wiring in PVC 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 PVC conduit, with				
	modular switch, modular plate, suitable GI box as required. Group C	1470	Pt.	564	8,29,080.00
	- Cloud C	14/0	1 1.	304	0,29,000.00
137	Power Plug wiring in PVC Conduit (2 x 4 Sq.mm)				
137	1				·
137	Wiring for light/ power plug with 2 x 4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit alongwith 1 No 4 sq. mm FR PVC insulated				

S.No	Description of Items	Qty.	Unit	Rate	Amount
138	Power Plug wiring in PVC Conduit (4 x 4 Sq.mm)				
130	Wiring for light/ power plug with 4 x 4 sq. mm FR PVC insulated copper conductor single				
	core cable in surface/ recessed PVC conduit alongwith 2 No 4 sq. mm FR PVC insulated				
	copper conductor single core cable for loop earthing as required.	500	Pt.	299	1,49,500.00
			-		1,10,000.00
139	Circuit wiring in PVC conduit				
	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of PVC				
	insulated copper conductor, single core cable in surface/ recessed PVC conduit as required				
	2 x 1.5 Sq.mm. + 1 x 1.5 Sq.mm. earth wire	1100	Mtr.	97	1,06,700.00
	2 x 2.5 Sq.mm. + 1 x 2.5 Sq.mm. earth wire	4500	Mtr.	125	5,62,500.00
	2 x 4 Sq.mm. + 1 x 4 Sq.mm. earth wire	15000	Mtr.	169	25,35,000.00
	2 x 6 Sq.mm. + 1 x 6 Sq.mm. earth wire	250	Mtr.	244	61,000.00
	4 x 6 Sq.mm. + 2 x 6 Sq.mm. earth wire	300	Mtr.	387	1,16,100.00
140	Circuit wiring in PVC conduit				
	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required				
	2 X 10 sq. mm + 1 X 10 sq. mm earth wire	425	Mtr.	417	1,77,225.00
	4 X 10 sq. mm + 2 X 10 sq. mm earth wire	750	Mtr.	803	6,02,250.00
	4 X 16 sq. mm + 2 X 16 sq. mm earth wire	825	Mtr.	1177	9,71,025.00
141	TV cables in existing conduits				
	Supplying and drawing co-axial TV cable RG-6 grade copper conductor PE insulated, with				
	PVC shealth in the existing surface/ recessed PVC conduit as required.				
		300	Mtr.	29	8,700.00
142	S/ F PVC Conduit				
	Supplying and fixing of following sizes of PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	25 mm	800	Mtr.	52	41,600.00
143	S/ F Modular Type Switch/ Socket				
	Supplying and fixing following modular type switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	6/ 10 Amps, One Way Switch	1200	Each	71	85,200.00
	5/ 6 Amp, 5 Pin Socket Outlet	461	Each	95	43,795.00
	Telephone Socket Outlet	80	Each	77	6,160.00
	TV Antenna Socket Outlet	10	Each	77	770.00
144	S/ F Modulat Type Electronic Fan Regulator				
	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	293	Each	321	94,053.00
145	S/ F Modular Type Blanking Plate				
	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	120	Each	29	3,480.00
146	S/ F Modular Boxes, Base & Cover Plate				
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.				
	1 or 2 Module (78 mm x 78 mm x 45 mm)	800	Each	115	92,000.00
	3 Module (78 mm x 100 mm x 45 mm)	450	Each	139	62,550.00
147	S/ F Light Plug Point With Modular Type Accessories				
	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection painting etc. as required. (For light plugs to be used in non residential buildings)	530	Each	237	1,25,610.00
148	S/ F Power Plug Point with Modular Type Accessories 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 20/ 16 amps modular socket outlet and 20/16 amps modular switch, connection etc. as required.	530	Each	313	1,65,890.00
149	S/ F Ceiling Rose				
	Supplying and fixing 2 pin, 5 amp ceiling rose on the existing junction box/ PVC box including connection etc as required.	293	Each	23	6,739.00
150	S/ F Call Bell Buzzer				
	Supplying and fixing call bell/ buzzer suitable for DC/ AC single phase, 230 volts, complete as required.	40	Each	60	2,400.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
151	S/ F Electronic Dingdong Call Bell				
	Suplying and fixing dingdong call bell suitabl for DC/ AC, single phase, 230 volts, complete as required.	40	Each	106	4,240.00
152	S/ F Electronic Musical Call Bell				
132	Suplying and fixing electronic musical call bell suitabl for DC/ AC, single phase, 230 volts,				
	complete as required.	20	Each	231	4,620.00
153	ITC Fluorescent Fitting Directly on Surface				
	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	50	Each	36	1,800.00
454	ITC Fluorescent Fitting With Down Bods				
154	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 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.	10	Each	169	1,690.00
					.,000.00
155	ITC Ceiling Fan				
	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 as required.	293	Each	44	12,892.00
156	ITC Exhaust Fan Upto 450 mm Sweep				
	Installation of exhaust fan upto 450 mm sweep in the existing opening, including making the hole to suit the size of the above fa, making good the damage, connection, testing, commissioning etc. as required.	36	Each	192	6,912.00
157	Fixing Louvers Shutters For Exhaust Fan				
	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	36	Each	50	1,800.00
В.	DISTRIBUTION BOARD, MCCB, MCB & RCCB				
150	S/ F MCCB In Cubical Panel Board/ VTPN DB				
158	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board/ VTPN DB including drilling holes in cubicle panel, making connections, etc. as required.				
	25/ 100 Amps, 16 kA	10	Each	4788	47,880.00
	ZUI 100 AIIIpo, 10 KA	10	Lacii	7700	47,000.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
	125 Amps, 16 kA	1	Each	7298	7,298.00
159	Prewired SP & N MCB Distribution Board				
	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 FRLS 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)				
	2 + 12 way, Double door	1	Each	3613	3,613.00
160	Prewired TP & N MCB Distribution Board				
	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)				
	6 Way (4 + 18), Double Door	4	Each	9496	37,984.00
	8 Way (4 + 24), Double Door	12	Each	10405	1,24,860.00
	12 Way (4 + 36), Double Door	10	Each	12782	1,27,820.00
161	Prewired Vertical Type TP & N MCB Distribution Board				
101	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).				
	8 Way Double Door	7	Each	11123	77,861.00
	12 Way Double Door	4	Each	14768	59,072.00
162	S/ F 'C' Series, SP MCB				
	Supplying and fixing following rating, 240/ 415 volts, "C" series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	6/ 32 Amps, Single Pole	572	Each	156	00 222 00
	or 32 Arrips, Single Fulle	312	Eacii	100	89,232.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
	6/ 32 Amps, TPN	104	Each	927	96,408.00
163	S/ F SP MCB Blanking Plate				
	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	50	Each	10	500.00
	S/ F Four Pole MCB Isolator				
	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connectins, testing and commissioning etc. as required.				
	40 Amps	9	Each	675	6,075.00
	63 Amps	21	Each	383	8,043.00
164	S/ F SPN RCCB				
	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.				
	16/ 25 Amps	33	Each	1831	60,423.00
	40 Amps	22	Each	1956	43,032.00
	63 Amps	24	Each	2557	61,368.00
	S/ F 20 Amps SPN MCB Industrial Socket Outlet				
C.	EARTHING INSTALLATION				
165	GI Plate Earthing				
103	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	20	Sat	4400	00 000 00
		20	Set	4490	89,800.00
166	GI Plate Earthing				
	Earthing with Cu. earth Plate 600mm x 600mm x 3mm thick including accesssories, and providing masonary enclosure with cover plate having locking arrangement and watering pipe pipe of 2.7 mtr long etc. with charcoal or coke and salt) as required				
		14	Set	9292	1,30,088.00
167	S/ L 25 mm x 5 mm CU Strip in Ground				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Providing and fixing 25 mm X 5 mm copper strip on surface or I nrecess for connections				
	etc. as required. 2 nos used for 50 x 5 for the Neutral earthing of euipments)				
		300	Mtr.	856	2,56,800.00
168	S/ L 25 mm x 5 mm GI Strip on Surface				
	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc.				
	as required.	500	Mtr.	142	71,000.00
169	P/ F 6 SWG Loop Earthing Wire in Surface/ Reccess				
100	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along				
	with existing surface/ recessed conduit/ submain wiring/ cable as required.	300	Mtr.	23	6,900.00
	with existing surface, recessed conduit submain withing, cable as required.	300	IVILI .	25	0,900.00
D.	LIGHTNING CONDUCTOR				
470	PUE Common Limbtonia a Complete a Finish				
170	P/ F Copper Lightning Conductor Finial				
	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	0	E I.	77.4	4 5 40 00
	holes etc. complete as required.	2	Each	774	1,548.00
171	Reverting, Sweating and Soldering Lightning Conductor Tape				
17.1	Reverting, sweating and soldering copper/ GI tape (with another copper/ GI tape, base)				
	of the finial or any other metallic object) as required.		Each	52	
	of the fillial of any other metalic object) as required.		Lacii	32	
172	P/ F Copper Lightning Conductor Tape in Horizontal Run				
	Providing and fixing copper tape 20 mm X 3 mm thick on parapet or surface of wall for				
	lightning conductor complete as required.(For horizontal run)	300	Mtr.	297	89,100.00
			· · · · · · · · · · · · · · · · · · ·		
173	P/ F Copper Lighting Conductor Tape in Vertical Run				
	Providing and fixing copper tape 20 mm X 3 mm thick on parapet or surface of wall for				
	lightning conductor complete as required.(For vertical run)	100	Mtr.	306	30,600.00
174	P/ F Testing Joint For Copper Lightning Conductor				
1/4	Providing and fixing testing joint, made of 20 mm X 3 mm thick copper strip, 125 mm long,				
	with 4 nos. of tinned brass bolts, nuts, chuck nuts and spring washers etc. complete as				
	required.	0	Each	195	
	required.	0	Eacii	195	
175	P/ L Copper Earth Tape For Lightning Conductor				
	Providing and laying copper tape 32 mm X 6 mm from earth electrode directly in ground as				
	required.	70	Mtr.	893	62,510.00
			-		1=,110.00
176	Copper Plate Earthing				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories,				
	and providing masonry enclosure with cover plate having locking arrangement and				
	watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.				
		6	Set	9292	55,752.00
E.	CABLES, MAINS AND SUB MAINS				
477	Laying of Cables on Cable Tray				
177	S/ F MS CABLE TRAYS Cympleing and installing following size of perfected are pointed M.C. cable trays with				
	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, painting				
	suspenders etc as required.				
	150 mm width X 50 mm depth X 1.6 mm thickness	500	Mtrs.	520	2,60,000.00
	300 mm width X 50 mm depth X 1.6 mm thickness	100	Mtrs.	789	78,900.00
	600 mm width X 50 mm depth X 2.0 mm thickness	50	Mtrs.	1386	69,300.00
178	S/ F MS CABLE TRAY BENDS				
170	Supplying and installing following size of perforated pre-painted M.S. cable tray bends with				
	perforation not more than 17.5%, in convenient sections, joined with connectors,				
	suspended from the ceiling with M.S. suspenders including bolts & nuts, painting				
	suspenders etc as required.				
	150 mm width X 50 mm depth X 1.6 mm thickness	16	Each	964	15.424.00
	300 mm width X 50 mm depth X 1.6 mm thickness	8	Each	1458	11,664.00
	600 mm width X 50 mm depth X 2.0 mm thickness	4	Each	2653	· · · · · · · · · · · · · · · · · · ·
	000 mm width A 50 mm depth A 2.0 mm thickness	4	Lacii	2000	10,612.00
179	S/ F MS CABLE TRAY TEE'S				
	Supplying and installing following size of perforated pre-painted M.S. cable tray tee's with				
	perforation not more than 17.5%, in convenient sections, joined with connectors,				
	suspended from the ceiling with M.S. suspenders including bolts & nuts, painting				
	suspenders etc as required.				
	150 mm width X 50 mm depth X 1.6 mm thickness	4	Each	1714	6,856.00
	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	2704	5,408.00
	600 mm width X 50 mm depth X 2.0 mm thickness	2	Each	5008	10,016.00
180	S/ F MS CABLE TRAY CROSS MEMBERS				
	Supplying and installing following size of perforated pre-painted M.S. cable tray cross				
	members with perforation not more than 17.5%, in convenient sections, joined with				
	connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts,				
	painting suspenders etc as required.				
	150 mm width X 50 mm depth X 1.6 mm thickness	4	Each	767	3,068.00
	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1148	2,296.00
	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	2028	4,056.00

S.No	Description of Items	Qty.	Unit	Rate	Amount
181	Supplying and laying following sizes and cor PVC/XLPE insulated 1100 volt grade XLPE				
	insulated PVC sheathed, heavy duty, armoured electrical cable with aluminium				
	conductor for working voltage upto and including 1100 volts.(COnfirms to IS				
	:1554.Part1)				
	3.5 Core 300 Sq.mm	1050	Mtr.	2265	23,78,250.00
	S.S. Core Soo Sq.iiiiii	1000			20,1 0,200.00
	3.5 Core 240 Sq.mm	475	Mtr.	1850	8,78,750.00
	3.5 Core 150 Sq.mm	255	Mtr.	1167	2,97,585.00
	3.5 Core 120 Sq.mm	155	Mtr.	986	1,52,830.00
	3.5 Core 95 Sq.mm	190	Mtr.	799	1,51,810.00
	3.5 Core 70 Sq.mm	140	Mtr.	606	84,840.00
	3.5 Core 35 Sq.mm	135	Mtr.	350	47,250.00
	4 Core 16 Sq.mm	34	Mtr.	235	7,990.00
	2 Core 10 Sq.mm		Mtr.	153	-
182	laying of one number PVC Insulated and PVC shethed /XLPE power Cables of 1.1 KV grade of following size direct in ground including excavation,sand cushioning and protecting covering and refilling the trench etc as required.				
	Above 185 sq mm and up to 400 sq mm.	70	Mtrs.	233	16,310.00
183	Laying and fixing of one no PVC insulated and PVC sheathed /XLPE power cable of 1.1 kV grade of following size on Cable tray as required.				
	Up to 35 sqmm. (Clambed with 1 mm thick saddle)	50	Mtrs.	20	1,000.00
	Above 35 sq mm and up to 95 sq mm. (Clambed with 25 x 3 mm thick MS Flat Clamp)	200	Mtrs.	48	9,600.00
	Above 95 sq mm and up to 185 sq mm. (Clambed with 25/40 x 3 mm thick MS Flat Clamp)	300	Mtrs.	59	17,700.00
	Above 185 sq mm and up to 400 sq mm. (Clambed with 25/40 x 3 mm thick MS Flat Clamp)	700	Mtrs.	91	63,700.00
184	End Termination of Cables				
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				

TWORK SYSTEM g sizes of PVC conduit along with accessories in surfac/	Qty. 2 2 4 2 4 6 40 2	Each Each Each Each Each Each Each Each	270 382 466 484 576 969 1086 245	540.00 764.00 1,864.00 968.00 2,304.00 5,814.00 43,440.00 490.00
	4 2 4 6 40	Each Each Each Each Each	466 484 576 969 1086	1,864.00 968.00 2,304.00 5,814.00 43,440.00
	2 4 6 40	Each Each Each Each	484 576 969 1086	968.00 2,304.00 5,814.00 43,440.00
	4 6 40	Each Each Each	576 969 1086	2,304.00 5,814.00 43,440.00
	6 40	Each Each	969 1086	5,814.00 43,440.00
	40	Each	1086	43,440.00
	2	Each	245	490.00
g sizes of PVC conduit along with accessories in surfac/				
g sizes of PVC conduit along with accessories in surfac/				
I and making good the same in case of reccessed conduit				
	0000	DM	50	
	2800	KM	52	1,45,600.00
ONE NETWORK SYSTEM				
	2222			
	2800	KM	52	1,45,600.00
	4500	Mtrs.	18	81,000.00
	300	Mtrs.	27	8,100.00
TWORK SYSTEM				
THORK GIOLEM				
	500	RM	42	21,000.00
	DNE NETWORK SYSTEM Ig sizes of PVC conduit along with accessories in surfac/ I and making good the same in case of reccessed conduit ing pair 0.5 mm dia FRLS PVC insulated anneade copper one cable in the existing surface /recessed steel /PVC TWORK SYSTEM Ig sizes of PVC conduit along with accessories in surfac/ I and making good the same in case of reccessed conduit	DNE NETWORK SYSTEM Ig sizes of PVC conduit along with accessories in surfac/ I and making good the same in case of reccessed conduit 2800 ing pair 0.5 mm dia FRLS PVC insulated anneade copper one cable in the existing surface /recessed steel /PVC 4500 300 TWORK SYSTEM	DNE NETWORK SYSTEM g sizes of PVC conduit along with accessories in surfac/ I and making good the same in case of reccessed conduit 2800 RM ing pair 0.5 mm dia FRLS PVC insulated anneade copper one cable in the existing surface /recessed steel /PVC 4500 Mtrs. 300 Mtrs.	2800 RM 52 DNE NETWORK SYSTEM Ig sizes of PVC conduit along with accessories in surfac/ Il and making good the same in case of reccessed conduit 2800 RM 52 ing pair 0.5 mm dia FRLS PVC insulated anneade copper one cable in the existing surface /recessed steel /PVC 4500 Mtrs. 18 300 Mtrs. 27 ITWORK SYSTEM

S.No	Description of Items	Qty.	Unit	Rate	Amount
K	ADDESSABLE FIRE DETECTION & ALARM SYSTEM				
189	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel / PVC conduit as required.				
	2 x 2.5 sq. mm	5200	Mtrs	53	2,75,600.00
190	Supply & fixing of following sizes of PVC conduit along with accessories in surface / recessed including cutting the wall & making good the same in case of recessed conduit as required, (for conduiting in working stations From junction box in raceway.)				
	25 mm dia.	2500	Mtrs	65	1,62,500.00
L	CLOSE CIRCUIT TELEVISON SYSTEM				
	DSR ITEMS				
191	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel / PVC conduit as required.				
	3 x 1.5 sq. mm	2000	Mtrs	50	1,00,000.00
192	Supplying and fixing of following sizes of steel conduit along with 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 complete as required and as per direction of Engineer in Charge.				
	25mm	500	Mtrs	142	71,000.00
Q	PUBLIC ADDRESS SYSTEM				
193	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel / PVC conduit as required.				
	2 x 1.5 sq. mm	1800	RM	36	64,800.00
194	Supplying and fixing of following sizes of steel conduit along with 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 complete as required and as per direction of Engineer in Charge.				
	25mm	700	RM	142	99,400.00
S.	SUBSTATION 11KV/433KV				
195	Supplying, and making Indoor cable end termination with Heat shrinkable jointing kit complete with all accessories, including lugs suitable for following sizes of 3 core XLPE aluminum conductor cable of 11 KV grade as required.				

S.No	Description of Items	Qty.	Unit	Rate	Amount
	3Cx240 sq.mm. XLPE insulated Al. Ar. Cable	6	Sets	6357	38,142.00
196	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of				
	11 KV grade of following size direct in ground in the same trench in one tier horizontal				
	formation including excavation, sand cushioning, protective covering and refilling the trench				
	etc as required				
	Above 120 sq. mm and upto 400 sq. mm	120	Metre	197	23,640.00
	HVAC WORK				
	GSS DUCTING				
197	Supply, installation, balancing and commissioning of factory fabricated GSS sheet metal				
	rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter				
	dampers, vanes, hangers, supports etc. as per approved drawings and specifications of				
	following sheet thickness complete as required.				
	0.63 MM (24 gauge) Galvanized Sheet Steel Ducting	780.041	Sqmt	725	5,65,530.00
	0.80 MM (22 gauge) Galvanized Sheet Steel Ducting	269	Sqmt	890	2,39,410.00
	1.0 MM (20 gauge) Galvanized Sheet Steel Ducting	10	Sqmt	1004	10,040.00
	1.25 MM (18 gauge) Galvanized Sheet Steel Ducting	10	Sqmt	1257	12,570.00
	Volume Control Damper (VCD)				
198	Supply, installation, testing and commissioning of GI volume control duct damper complete				
	with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc, as per				
	specifications.	12	Sqmt	5413	64,956.00
	SUPPLY / RETURN AIR GRILLES				
199	Supplying & fixing of powder coated extruded aluminium Supply/Fresh Air Grills with				
	aluminium volume control dampers as per specifications.	7	Sqmt	7107	49,749.00
200	Supplying & fixing of powder coated extruded aluminium Return / Exhaust Air Grilles with				
	louvers but without volume control dampers complete as required.	8	Sqmt	4040	32,320.00
	SUPPLY / RETURN AIR DIFFUSERS				
201	Supplying, fixing testing commissioning of supply air diffusers of powder coated aluminium with aluminium volume control dampers with anti smudge ring & removable core.				
	with aluminium volume control dampers with anti-smudge mig & removable core.	32	Sqmt	8661	2,77,152.00
202	Supplying fiving testing commissioning of Poture oir diffusors of poundar costed aluminium				
202	Supplying, fixing testing commissioning of Return air diffusers of powder coated aluminium				
	without volume control dampers with anti smudge ring & removable core.	40	Samt	5594	2,23,760.00
		40	Sqiiii	5594	2,23,760.00
	FIRE DAMPER				

S.No	Description of Items	Qty.	Unit	Rate	Amount
203	Supplying, Fixing,testing and commissioning of fire dampers in supply air duct/main branch and return air path as and where required of required sizes i/c control wiring,the damper shall be motorized and spring return so as to close the damper in the event of power failure automatically and open the same in case of power being restored. The spring return action shall be inbuilt mechanism and not externally mounted. The damper shall also be closed in the event of fire signal complete as required and as per specifications.	J			
	Fire damper	4	Sqmt	7053	28,212.00
	Actuator	8	Nos.	6551	52,408.00
204	Supplying, fixing acoustic lining of supply air duct and plenum with 25 mm thick resin bonded glass wool having density of 32 Kg/M³ with 25 mm x 25 mm GI section of 1.25 mm thick at 600 mm centre to centre covering with rienforced plastic tissue paper and 0.5 mm thick perforated aluminum sheet fixed to inside surface of ducts with cadmium plated nuts, bolts, stick pins, CPRX compound complete as required and as per specification.				
		120	Sqmt	543	65,160.00
205	Supplying, fixing accoustic lining on wall amd ceiling of AHU rooms with 50 mm thick, density 32 kg/cum resin bonded glass fiber insulation friction fixed in 610mm x 610 mm frame work made of 25 x 50 x 50 x 50 x 25 mm made out of 0.6 mm thick GI sheet U shaped channel and covered with reinforced fiber galss tissue and finished with 0.8 mm perfoarted aluminium sheet etc. complete as required and as per sepcifications.			204	
		170	Sqm.	864	1,46,880.00
206	Supplying and fixing of following thickness duly laminated aluminum foil of mat finish closed cell Nitrile rubber (class"O") insulation on existing duct after applying two coats of cold setting adhesive (CPRX compound). The joints shall sealed with 50 mm wide and 3 mm thick self adhesive nitrile rubber tape insulation complete as per specifications and as required.				
	19 mm thick (In Condition Space)	790.515	Sqm.	816	6,45,060.00
	25 mm thick (In Non - Condition Space)	270	Sqm.	1029	2,77,830.00
207	Supplying and Fixing 50 mm thick aluminium foil faced resin bonded fibre glass insulation (on duct) of density 24 kg/ cu.m after applying two coats of setting sdhesive (CPRX compound) sealing all joints with self adhesive aluminium tape and covering with 0.63mmx19mm GI wire mesh netting butting all joints and laced with GI wire complete as per specifications and as required (for indoor applications)				-
		20	Sqmt	368	7,360.00
					-

S.No	Description of Items	Qty.	Unit	Rate	Amount
208	Supplying and Fixing 50 mm thick aluminium foil faced resin bonded fibre glass insulation (on duct) of density 24 kg/ cu.m after applying two coats of setting sdhesive (CPRX compound) sealing all joints with self adhesive aluminium tape and covering with 0.63mmx19mm GI wire mesh netting butting all joints and laced with GI wire complete and finally covered with one layer of tar felt stuck with hot bitumin as per specifications and as	-			
	required (for outdoor applications)	20	Sqmt	427	8,540.00
	Total Amount				173,68,566.00
	PERMISSIBLE LIMIT UP TO 10% ("H	IGH" OR "	LOW")		
1	Name of the Bidder			:-	
2	Address of the Bidder			:-	
3	Total Amount of Civil & PHE Work, etc(Schedule Item)			Rs. :-	1802,98,905.04
4	For Civil Work,= I/we offer in Figures in words				
5				IN WORDS	

S.No	Description of Items	Qty.	Unit	Rate	Amount
6				HIGH, Low, As per estimate rate	
7	Total Amount of Electrical Work, HVAC and Fire Fighting (Schedule	e Item)		Rs. :-	173,68,566.00
8	For Electrical Work= I/we offer in Figures in words	-			
9				IN WORDS	
10				HIGH, Low, As per estimate rate	
	Director, IGIMS, Sheikhpura,		pura, Patna - 14		