

**DETAIL ESTIMATE OF CIVIL,SANITARY,EXTERNAL AND INTERNAL ELECTRIFICATION WORKS
OF**

PROPOSED ACADEMIC BUILDING, BLOCK-I, PHASE-II

OF MAHAPURUSHA SRIMANTA SANKARADEVA VISWAVIDYALAYA

AT ATUATIKA, RAIDONGIA,NAGAON, ASSAM

CIVIL WORKS : GROUND FLOOR

Sl.No.	DSR No.	Description of works	Unit	Qty.	Rate as per DSR	Amount
2.0 EARTH WORK						
1	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	3912.98	Rs.253.95	Rs.993,700.00
2	2.25(a)	Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth , sides of foundation etc. complete.	Cum	197.16	Rs.368.65	Rs.72,684.14
3	2.35	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
	2.35.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor:				
	2.35.3.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration	Sqm	1330.00	Rs.256.15	Rs.340,679.50
4.0 CONCRETE WORK						
4	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.5	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	69.17	Rs.6,833.40	Rs.472,666.28

5.0 REINFORCED CEMENT CONCRETE WORK						
5	5.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :				
	5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	45.09	Rs.10,185.05	Rs.459,217.42
		FORM WORKS				
6	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	351.59	Rs.608.35	Rs.213,889.78
7	5.9.3	Suspended floors, roofs, landings, balconies and access platform	Sqm	140.39	Rs.766.55	Rs.107,615.95
		STEEL REINFORCEMENT				
8	5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
	5.22A.6	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg	9065.41	Rs.89.65	Rs.812,714.21
6.0 MASONRY WORK						
9	6.2	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in:				
	6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	136.57	Rs.5,746.80	Rs.784,818.93
10	6.4.	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
	6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	62.82	Rs.8,512.10	Rs.534,710.12
		EXPOSED BRICK WALL				

11	6.38	Providing and laying autoclaved aerated cement blocks masonry with 100 mm thick AAC blocks in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand). The rate includes providing and placing in position 2 Nos 6 mm dia M.S. bars at every third course of masonry work.	Cum	90.18	Rs.8,890.80	Rs.801,756.79
DOOR WINDOW CHOWKATH AND SHUTTER						
12	NS	Providing, fitting and fixing Natural Fibre Thermosets composites Factory made Fire Retardant, U. V. Resistance, weather Proof Bamboo-Jute Composite DUROSAM @ make Grooved Frame of Section 75mm x 50mm with single rabbet, material including preparing of Surface & Finished with approved Quality Primer.	Rm	456.40	Rs.1,708.64	Rs.779,823.30
13	NS	Providing, fitting and fixing Natural Fibre Thermosets composites Factory made Fire Retardant, U. V. Resistance, weather Proof Bamboo-Jute Composite DUROSAM @ make Solid Frame of Section 75mm x 50mm with single/double rabbet, material including preparing of Surface & Finished with approved Quality Primer.	Rm	213.20	Rs.2,194.80	Rs.467,931.36
14	NS	Providing, fitting and fixing Natural Fibre Thermosets composites Factory made Fire Retardant, U. V. Resistance, weather Proof Bamboo Jute Composite DUROSAM @ make Grooved Frame of Section 100mm x 60mm with Single/Double rabbet, material including preparing of Surface & Finished with approved Quality Primer.	Rm	339.40	Rs.2,509.86	Rs.851,846.48

15	NS	Providing, fitting and fixing Natural Fibre Thermosets composites Factory made Fire Retardant, U. V. Resistance, weather Proof Bamboo Jute Composite DUROSAM® make Solid Frame of Section 100mm x 60mm with Double rabbet, material including preparing of Surface & Finished with approved Quality Primer.	Rm	85.00	Rs.2,992.48	Rs.254,360.80
16	NS	Providing, fitting and fixing Natural Fibre Thermosets Composites Factory made Fire Retardant, U. V. Resistance, Weather Proof Bamboo Jute Composite DUROSAM® make Hollow core Door Shutter of 30mm thick having core frame of 24mm thick Bamboo-Jute Composite (2 Nos. vertical cross member of 40mm x 24mm, intermediate vertical cross member of 25mm x 24mm, 1 No. Top, 1 No. bottom horizontal cross member of 40mm x 24mm & 1 No. intermediate horizontal cross member of 25mm x 24mm) fixed with 3mm Bamboo-Jute Composite Sheet on both side by Epoxy Resin and Aluminium rivet, fitted with 5 Nos. 100mm x 58mm x 1.9mm ISI marked S. S. hinges including preparing of surface and finished with approved quality primer as per IS 16096 : 2013	Sqm	101.04	Rs.7,303.02	Rs.737,860.63
17	NS	Providing, fitting and fixing Natural Fibre Thermosets composites Factory made Fire Retardant, U. V. Resistance, weather Proof Bamboo Jute Composite DUROSAM® make Glass Panel Double Leaf Window Shutter of 20 mm thick without glass. Each Leaf having provision 1 No. Glass of 4 mm thick, constructed by 75mm x 20mm Bamboo-Jute Polymer composites 2 nos. stiles and Rails, and 2 nos. stiles fitted with 3 Nos. 100mm x 58mm x 1.9mm ISI Marked S.S. Hinges including preparing of Surface & Finished with approved Quality Primer as per IS 16073 : 2013.	Sqm	222.58	Rs.7,200.36	Rs.1,602,656.13

18	14.6.1	Renewing glass panes, with wooden fillets wherever necessary:				
		Float glass panes of nominal thickness 4 mm				
		(weight not less than 10kg/sqm)	Sqm	291.30	Rs.1,351.15	Rs.393,590.00
	10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with rectangular/ L-Type sections, made of 1.60 mm thick M.S. Sheet, joints mitred, welded and grinded finish, with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				
	10.15.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	Kg	1503.06	Rs.146.6	Rs.220,273.44
	13.00	13.0 FINISHING				
		CEMENT PLASTER (IN FINE SAND)				
19	13.1	12 mm cement plaster of mix :				
	13.1.1	1:4 (1 cement: 4 fine sand)	Sqm	1330.00	Rs.294.85	Rs.392,150.50
	13.5	15 mm cement plaster on rough side of single or half brick wall of mix:				
20	13.5.1	1:4 (1 cement: 4 coarse sand)	Sqm	1971.48	Rs.354.50	Rs.698,887.89
	13.6	20 mm cement plaster of mix :				
21	13.6.1	1:4 (1 cement: 4 coarse sand)	Sqm	1322.10	Rs.421.40	Rs.557,134.63
		PAINTING WORK				
22	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	4623.58	Rs.214.30	Rs.990,832.98
23	13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
	13.43.1	Water thinnable cement primer	Sqm	4623.58	Rs.64.45	Rs.297,989.67
	13.48	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications :				

24	13.48.1	Two or more coats applied on walls @ 1.25 ltr/10 sqm over and including one coat of Special primer applied @ 0.75 ltr /10 sqm	Sqm	4623.58	Rs.158.95	Rs.734,917.88
25	13.57	Painting with oil type wood preservative of approved brand and manufacture :				
	13.57.1	New work (two or more coats)	Sqm	900.44	Rs.47.10	Rs.42,410.58
	13.50	Applying priming coat:				
26	13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	Sqm	159.90	Rs.55.50	Rs.8,874.45
	13.48	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications :				
27	13.48.3	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand and manufacture	Sqm	159.90	Rs.140.05	Rs.22,394.00
		11. TILE WORK				
28	11.41A	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
		Double charge vitrified tile polished finish of size				
	11.41A.1.3	Size of Tile 600 x 1200 mm	Sqm	1079.62	Rs.1,407.05	Rs.1,519,079.32

29	11.56	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
	11.56.1	Polished Granite stone slab colour of Black, Cherry/Ruby Red or equivalent	Sqm	183.25	Rs.3,908.80	Rs.716,287.60
30	11.41A	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
	1.41A.3	Glazed Vitrified tiles Matt/Antiskid finish of size				
	11.41A.3.1	Size of Tile 600 x 600 mm	Sqm	61.34	Rs.1,311.05	Rs.80,419.81

31	8.31	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades 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 sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm	113.60	Rs.1,063.45	Rs.120,807.92
32	12.45	all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high				
	12.45.4	Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm having approx. 15 % perforated area with perforation	Sqm	1247.44	Rs.1,483.15	Rs.1,850,140.64

	9.62	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete :				
	9.62.1	300x16 mm	Each	68.00	Rs.180.55	Rs.12,277.40
	9.63	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :				
	9.63.1	250x10 mm	Each	308.00	Rs.74.65	Rs.22,992.20
	9.66	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :				
	9.66.1	125 mm	Each	188.00	Rs.35.20	Rs.6,617.60
	9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	Each	34.00	Rs.1,025.65	Rs.34,872.10
					TOTAL(A)=	Rs.19,011,882.40

SEPTIC TANK						
EARTHWORK						
1	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.8.1	All kinds of soil.	Cum	63.00	286.85	Rs. 18,071.55
Concrete work						
2	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	Cum	4.94	6326.05	Rs. 31,250.69
Reinforced Concrete Cement						

3	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.				
		(Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately).				
	5.33.1	All works upto plinth level	Cum	10.88	7997.30	Rs. 87,010.62
Formwork						
4	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
	5.9.3	Suspended floors, roofs, landings, balconies and access platform	Sqm	23.83	766.55	Rs. 18,264.74
Steel Reinforcement						
5	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
	5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	1206.92	89.65	Rs. 108,200.09
Masonry Work						
7	6.2	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in:				
	6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	15.35	5746.80	Rs. 88,188.09
	7.6	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with :				
	7.6.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	3.85	7914.50	Rs. 30,431.25
Sub-Head : Finishing						

8	13.5	15 mm cement plaster on rough side of single or half brick wall of mix :				
	13.5.2	1:6 (1 cement: 6 coarse sand)	Sqm	140.80	339.10	Rs. 47,745.28
					TOTAL(B)=	Rs. 429,162.32

17.0 SANITARY INSTALLATIONS

1	17.1	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 level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	4.00	5781.35	Rs.23,125.40
2	17.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 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				
	17.3.1	W.C. pan with ISI marked white solid plastic seat and lid	Each	8.00	6941.30	Rs.55,530.40
3	17.19	Providing and fixing controlled flush, low level cistern made of vitreous china with all fittings complete.				
	17.19.1	10 litre (full flush) capacity-white	Each	8.00	1930.85	Rs.15,446.80

4	17.6	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete, including painting of fittings and cutting and making good the walls and floors etc. wherever required :				
	17.6.1	Single squatting plate with 5 litre P.V.C. automatic flushing cistern	Each	8.00	7752.60	Rs.62,020.80
5	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
	17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	Each	4.00	3392.85	Rs.13,571.40
6	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
	17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	Each	12.00	3392.85	Rs.40,714.20
7	17.31	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	Each	10.00	1411.15	Rs.14,111.50

8	17.33	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	Each	10.00	942.15	Rs.9,421.50
9	17.71	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	Each	10.00	146.30	Rs.1,463.00
10	17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	Each	6.00	204.70	Rs.1,228.20
11	17.34	Providing and fixing toilet paper holder :				
	17.34.1	C.P. brass	Each	11.00	680.80	Rs.7,488.80
12	17.69	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.				
	17.69.2	Waste coupling 38 mm dia of 83 mm length and 77mm breadth, weighing not less than 60 gms	Each	16.00	109.70	Rs.1,755.20
13	17.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink				
14	17.70.1	Bottle trap 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	Each	8.00	325.10	Rs.2,600.80

15	18.8	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.				
	18.8.3	25 mm nominal dia Pipes	Rm	25.00	626.05	Rs.15,651.25
	18.8.4	32 mm nominal dia Pipes	Rm	35.00	712.75	Rs.24,946.25
		External work				
	18.9.9	100 mm nominal dia Pipes	Rm	40.00	2811.75	Rs.112,470.00
	18.9.6	50 mm nominal dia Pipes	Rm	25.00	811.85	Rs.20,296.25
16	17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
	17.38.1	100 mm dia				
	17.38.1.1	Sand cast iron S&S as per IS - 1729	Each	26.00	530.70	Rs.13,798.20
	17.38.2	75 mm dia				
17	17.38.2.1	Sand cast iron S&S as per IS - 1729	Each	26.00	440.00	Rs.11,440.00
18	17.40	Providing and fixing heel rest sanitary bend				
	17.40.1	100 mm dia				
	17.40.1.1	Sand cast iron S&S as per IS - 1729	Each	10.00	513.30	Rs.5,133.00
	17.40.2	75 mm dia	Each	10.00	432.00	Rs.4,320.00
	17.40.2.	Sand cast iron S&S as per IS - 1729				
19	17.41	Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :				
	17.41.1	100x100x100x100 mm				
	17.41.1.1	Sand cast iron S&S as per IS - 1729	Each	8.00	1038.75	Rs.8,310.00
	17.41.2	75x75x75x75 mm				
	17.41.2.1	Sand cast iron S&S as per IS - 1729	Each	8.00	754.45	Rs.6,035.60

20	17.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter :				
	17.58.1	100 mm	Each	4.00	549.65	Rs.2,198.60
21	17.60	Providing and fixing trap of self				
	17.60.1	100 mm inlet and 100 mm outlet				
	17.60.1.1	Sand cast iron S&S as per IS:	Each	12.00	1604.10	Rs.19,249.20
22	19.19	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality				
	19.19.2	M D - 10				
	19.19.2.1	Square shape 450 mm internal dimension	Each	4.00	1257.40	Rs.5,029.60
23	19.22	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all-round with cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:4 (1 cement : 4 coarse sand) plastered with cement mortar 1:3 (1 cement : 3 coarse sand) on inside of the manhole wall, lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine sand) joints between sand cast iron tee and S.W. pipe, making required channels complete as per standard design and specifications :				
	19.22.1	100 mm dia sand cast iron drop	Each	4.00	10137.65	Rs.40,550.60
24	18.9	Providing and fixing Chlorinated				
		External work				
	18.9.3	25 mm nominal dia Pipes	Rm	55.00	370.65	Rs.20,385.75
	18.9.2	20 mm dia	Rm	35.00	275.25	Rs.9,633.75
	18.9.1	15 mm dia	Rm	30.00	221.35	Rs.6,640.50
25	18.50	Providing and fixing C.P. brass				
	18.50.1	15 mm nominal bore	Each	12.00	715.05	Rs.8,580.60

26	17.7B	Providing and fixing wash basin with C.I. brackets, 15 mm PTMT pillar cock, 32 mm PTMT waste coupling of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required. White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm PTMT pillar cock	Each	12.00	2521.85	Rs.30,262.20
		(a) Light type				
27	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 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	Each	4000.00	9.70	Rs.38,800.00
TOTAL OF SANITAY WORKS (C)=						Rs.652,209.35

INTERNAL ELECTRICAL WORK						
Sl. No.	Item No.	Description	Qty.	Unit	Rate	Total
		WIRING IN STEEL AND PVC CONDUIT				
1	1.1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.1.1	Group A	65	Point	₹ 821.00	₹ 53,365.00
	1.1.2	Group B	71	Point	₹ 937.00	₹ 66,527.00
	1.1.3	Group C	135	Point	₹ 1,189.00	₹ 160,515.00
2	1.7	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.				
	1.7.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	0	Metre	₹ 208.00	₹ 0.00

	1.7.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	2789	Metre	₹ 229.00	₹ 638,681.00
	1.7.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	1856	Metre	₹ 363.00	₹ 673,728.00
3	1.31	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 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	55	Each	₹ 401.00	₹ 22,055.00
4	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	38	Each	₹ 495.00	₹ 18,810.00
5	2.5	2.5Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	2.5.1	4 way (4 + 12), Double door	2	Each	₹ 5,651.00	₹ 11,302.00
	2.5.2	8 way (4 + 24), Double door	2	Each	₹ 7,744.00	₹ 15,488.00
	2.5.3	12 way (4 + 36), Double door	4	Each	₹ 9,828.00	₹ 39,312.00
6	2.1	2.10Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	105	Each	₹ 199.00	₹ 20,895.00
	2.10.2	Double pole	5	Each	₹ 544.00	₹ 2,720.00

7	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.14.2	40 A	8	Each	₹ 2,626.00	₹ 21,008.00
	2.14.3	63 A	8	Each	₹ 2,640.00	₹ 21,120.00
8	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	85	Metre	₹ 543.00	₹ 46,155.00
	1.14.11	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	85	Metre	₹ 752.00	₹ 63,920.00
9	6.2	6.2 Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	120	Each	₹ 448.00	₹ 53,760.00
10	NON DSR	Supply, Installation, Testing and Commissioning of 1200 mm sweep Ceiling Fans with connection of make Orient Model SUMMERKING (XI Aluminium Blades) or equivalent	89	Each	₹ 2,450.00	₹ 218,050.00
11	NON DSR	Supply, Installation, Testing and Commissioning of 300mm sweep Exhaust Fans with connection from existing 6A socket outlet (rate for socket and connection to the socket to be taken separately) of make Orient Model 300 mm Spring Air or equivalent.	10	Each	₹ 1,850.00	₹ 18,500.00
12	NON DSR	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	NON DSR	1 or 2 Module (75mmX75mm)	30	Each	₹ 201.00	₹ 6,030.00
	NON DSR	3 Module (100mmX75mm)	5	Each	₹ 245.00	₹ 1,225.00
	NON DSR	6 Module (200mmX75mm)	8	Each	₹ 256.00	₹ 2,048.00

	NON DSR	8 Module (200mmX75mm)	20	Each	₹ 356.00	₹ 7,120.00
	NON DSR	12 Module (200mmX75mm)	15	Each	₹ 456.00	₹ 6,840.00
	NON DSR	20 W LED DOWN LIGHT	52	Each	₹ 856.00	₹ 44,512.00
	NON DSR	BOLARD	10	Each	₹ 8,750.00	₹ 87,500.00
TOTAL (INTERNAL ELECTRIFICATION) (D)=						₹ 2,321,186.00

Sl. No.	Item No.	Description	Qty.	Unit	Rate	Total
1		Supplying and making outdoor end termination with cast resin compound including aluminium lugs and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
	9.2.28	3½ X 400 sq. mm	85	Metre	₹ 3,362.00	₹ 285,770.00
	9.2.11	3 X 120 sq. mm	45	Metre	₹ 1,694.00	₹ 76,230.00
		MAIN LT PANEL- ACADEMIC CUM ADMN. BUILDING				
2	NON DSR	Supplying and installation of metal enclosed wall/floor mounted front operated cubical type switch gear panel suitable for indoor installation conforming to IS: 8623 (Part I & II). Panel should be made of sheet steel and thickness not less than 2mm and structural steel having light section. The panel shall be completely dust tight and vermin proof and shall be painted with anti corrosive and anti condensation type two coats of primer and two coats of paint. All wiring shall be PVC insulated and PVC sheathed of 1100 volt grade of required size. The panel should have provision of entry of cable at the bottom and also provision of out going feeders from the bottom of the panel. The panel shall be incorporated with double busbar system. The bus bar shall be of high quality copper of uniform cross section. The panel shall consist of the following items (viz. Voltmeter, Ammeter, CT, indicating lamps, selector switch etc.) connected as per drawing and shall be flush mounted on the front of the panel.	1	SET	₹ 598,500.00	₹ 598,500.00
		Incommer:				

	1	630A 4P MCCB, 36 KA Electronic Release – 1 No. [SET AT 80%]				
	2	250A 4P MCCB, 36 KA Electronic Release – 2 Nos.				
	3	250 A, 4P, on-load Changeover switch - 1 No.				
	4	Digital Ammeter - 2 Nos.				
	5	Digital Voltmeter - 2 Nos.				
	6	CT 250/5 & CT 630/5 -2 Sets.				
	7	Switch Fuse Unit - 6 Nos				
	8	Selector Switch - 4 Nos				
	9	LED Indicating Lamp 2 Sets				
	10	Bus-Bars: 1280 A TPN electrolytic Copper Bus Bar of uniform cross-section (80mmx10mm) – 1 set				
	11	Bus-Bars: 480 A TPN electrolytic Copper Bus Bar of uniform cross-section (30mmx10mm) – 1 set				
		Outgoing:				
	1	160 A 4P MCCB 25 KA – 6 Nos.				
	2	100 A 4P MCCB 25 KA – 6 Nos.				
	3	40A 4P MCB -6 Nos.				
	4	32A DP MCB - 3 Nos				
		SUBMAIN LT PANEL [LIGHT]-G (GROUND FLOOR)				

3	NON DSR	Supplying and installation of metal enclosed wall/floor mounted front operated cubical type switch gear panel suitable for indoor installation conforming to IS: 8623 (Part I & II). Panel should be made of sheet steel and thickness not less than 2mm and structural steel having light section. The panel shall be completely dust tight and vermin proof and shall be painted with anti corrosive and anti condensation type two coats of primer and two coats of paint. All wiring shall be PVC insulated and PVC sheathed of 1100 volt grade of required size. The panel should have provision of entry of cable at the bottom and also provision of out going feeders from the bottom of the panel. The panel shall be incorporated with double busbar system. The bus bar shall be of high quality copper of uniform cross section. The panel shall consist of the following items (viz. Voltmeter, Ammeter, CT, indicating lamps, selector switch etc.) connected as per drawing and shall be flush mounted on the front of the panel.	1	SET	₹ 986,500.00	₹ 986,500.00
		Incommer:				
	1	100 A 4P MCCB 25 KA – 8 Nos.				
	2	Digital Ammeter - 1 No.				
	3	Digital Voltmeter - 1 No.				
	4	CT 100/5 & -2 Sets.				
	5	Switch Fuse Unit - 3 Nos				
	6	Selector Switch - 2 Nos				
	7	LED Indicating Lamp 1 Set				
		Bus-Bars: 200 A TPN electrolytic Copper Bus Bar of uniform cross-section (25mmx5mm) – 1 set				
		Outgoing:				
	1	40A DP MCB - 12 Nos				
		SUBMAIN LT PANEL [POWER]-G (GROUND FLOOR)				

4	NON DSR	Supplying and installation of metal enclosed wall/floor mounted front operated cubical type switch gear panel suitable for indoor installation conforming to IS: 8623 (Part I & II). Panel should be made of sheet steel and thickness not less than 2mm and structural steel having light section. The panel shall be completely dust tight and vermin proof and shall be painted with anti corrosive and anti condensation type two coats of primer and two coats of paint. All wiring shall be PVC insulated and PVC sheathed of 1100 volt grade of required size. The panel should have provision of entry of cable at the bottom and also provision of out going feeders from the bottom of the panel. The panel shall be incorporated with double busbar system. The bus bar shall be of high quality copper of uniform cross section. The panel shall consist of the following items (viz. Voltmeter, Ammeter, CT, indicating lamps, selector switch etc.) connected as per drawing and shall be flush mounted on the front of the panel.	1	SET	₹ 135,460.00	₹ 135,460.00
		Incommer:				
	1	160A 4P MCCB, 36 KA Electronic Release – 2 No.				
	2	Digital Ammeter - 1 No.				
	3	Digital Voltmeter - 1 No.				
	4	CT 100/5 & -8 Sets.				
	5	CT 400/5 -2 Sets.				
	6	Switch Fuse Unit - 3 Nos				
	7	Selector Switch - 2 Nos				
	8	LED Indicating Lamp 2 Sets				
	9	Bus-Bars: 320 A TPN electrolytic Copper Bus Bar of uniform cross-section (400mmx5mm) – 1 set				
		Outgoing:				
	1	40A 4P MCB -4 Nos.				
		E A R T H I N G				

5	5.4	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.	8	SET	₹ 6,216.00	₹ 49,728.00
6	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	856	Metre	₹ 313.00	₹ 267,928.00
7	5.5	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. (but without charcoal/ coke and salt) as required.	4	SET	₹ 10,714.00	₹ 42,856.00
8	5.8	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	115	Metre	₹ 853.00	₹ 98,095.00
TOTAL (EXTERNAL ELECTRICATION) (E)=						₹ 2,541,067.00

GRAND TOTAL= ₹ 24,955,507.07