Visit to the Construction site by the prosppective bidders is highly recommended before quoting the rates for various items of works herebelow. Bidders are requested to quote their most competitive items rates in this financial bid. Please refer to the tender drawings showing the site plan & various floor plans, sections, elevations and some items drawings. Please refer to these drawings before quoting your rates. The rates quoted shall be excluding GST. In the last page, in summary sheet, GST to be added. CBCRD Trust reserves its right to either execute or take out from the scope of works, any or all the items fully or partially, depending on the administrative exigencies. Hence Bidders attention is drawn to quote your most workbale rate for each & every item. The rates and amounts for each item shall be written in both figures and words in the respective columns.

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
	MAIN BUILDING WORKS				
1a	Earthwork in all soils & soft rock: excavation for foundation (for narrow excavation) to full depth as per design in all soils including soft disintegrated rock not requiring blasting and bailing out water wherever necessary. The item shall also include refilling the sides of foundation with excavated earth other than sand in layers with well ramming and compacted and depositing the surplus earth in places shown by the departmental officers with an initial lead of 10m and initial lift of 2m and clearing and leveling the site etc. complete complying with standard specification.	130.00	Cubic Metre		
1b	Earth work in Hard rock: Excavation for foundations for buildings in hard rock using Compressor machines, hydraulic machines (blasting prohibited) and depositing on bank for all lifts and with an initial lead-1 of 10m and up to 3m depth including all operational, incidental, labour charges such as shoring, sheeting, planking, strutting etc., and overheads & contractors profit complete for finished item of work excluding seigniorage excluding de watering charges etc.,	194.00	Cubic Metre		
1c	CREATING COLUMN FOUNDATION IN HARD ROCK STRATA (to be operted only in locations where the land is with full of rocky strata and excavation even for a depth of 1 feet from existing ground surface is difficult): Providing foundation bed in open shallow lelvel hard rocky strata by drilling 25mm diameter holes in the rock using hydraulic bore to a depth of atlest 2 feet from the surface at every 12 inches interval in both the directions. The item shall include providing & inserting 20 mm diameter reinforcement rods to the full depth of the holes, firmly fixed with Fosroc make bonding chemical in the gaps. The same steel rods shall be projected out above the surface level and then bended to the sideways for atleast to 2 feet horizontal length to have bonding with footing mat steel and M25 concrete. The column bed shalll be minimum of 4ft x 4 ft x 6 inches depth laid with M25 concrete. The footing mat shall be made of 12 mm dia rods spaced at 5" centre to centre in both directions. The payment is per unit surfaceDesign Mix: M-20(Weigh Batch) Cente		Square metres		
2	PRE-CONSTRUCTION ANTITERMITE TREATMENT: Providing Pre-constructional anti- termite treatment and creating a chemical barrier to the building. The Minimum 10 years guarntee for all anti termite treatment works to cover this guarantee 5% of the bill amount will be held till guarantee period.				
а	Providing Pre-constructional anti- termite treatment and creating a chemical barrier to the building by injecting chemical emulsion of required concentrations raft slab and beam, under Cellular raft slab, around the footings, column pits, trenches, pits, wall trenches, back fill, plinth filling, junction of wall and floor, side walls of foundation, external perimeter of building, surrounding of pipes expansion joints, etc. as per IS specification and as per the instructions of chemical manufacturer and all as directed. The treatment shall be carried out strictly in accordance with the technical specification and conforming to IS 6313 (PART-2) or equivalent BS specification.				
b	The chemical to be used as insecticides for the treatment shall be CHLOROPYRIPHOS 20% (or) 50% EC and the application shall be dilute one part of chemical 20% or 50% EC with 19 or 49 parts of water to get 1% emulsion and strictly inaccordance with the manufacturer's specification.(or) 2.The chemical to be used as insecticides for the treatment shall be IMIDACLOPRID 30.5% S C and the application shall be applied at 0.075% active ingredients concentration i.e. 2.1ml formulated product diluted 1 lit of water and strictly in accordance with the manufacturer's specification.	489.00	Sqm		
3a	Plain Cement Concrete (1:4:8) (cement: fine aggregate: Coarse aggregate) for foundations and under flooring bed using coarse aggregate 40mm size hard, machine crushed granite from approved quarry including cost and conveyance of all materials like cement, sand, coarse aggregate, water etc. to site including all charges for machine mixing, laying concrete in foundations and under flooring bed, ramming in 15 cm layers finishing top surface to the required level curing etc., and overheads & contractors profit complete for finished item of work.	73.00	Cubic Metre		
3b	RANDOM RUBBLE STONE MASONRY (RRM)				

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
	Random Rubble stone masonry in CM (1:8) prop: (Cement: Screened sand) using hard granite stones carted from approved quarry including cost and conveyance of all materials like cement, screened sand, water, stones etc., from approved quarry, to site and excluding seigniorage charges, sales & other taxes on all materials including labour for cutting stones to required size and shape, mixing, of cement, mortar, construction, curing etc.,and overheads & contractors profit complete for finished item of work in foundation and basement.	29.00	Cubic Metre		
	Earth Filling (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 up to 2.5 m, by earth brought from outside.	220.00	Cubic Metre		
	Supplying and Erecting centering & shuttering for sides and soffits including supports and strutting up to 3.30 m height with all cross bracing for plane surfaces as detailed below, using mild steel sheets of 90 X 60 cm 10 gauge stiffened with MS angle of 25 x 25 x 3mm for boarding, laid over adjustable span & jacks and supported by 50mm dia pipes for general pipes scaffolding systems @ a spacing of 1.20m c/c and vertical connected at a height of 2.0m c/c including 'C' & 'U' clamps and base receiver cup at bottom for connecting pipes etc and removable systems etc complete				
а	Footings shuttering	60.00	Cubic Metre		
b	Column Shuttering				
i	Ground floor	22.00	Cubic Metre		
ii	First Floor	14.00	Cubic Metre		
iii	Terrace Floor	3.00	Cubic		
С	Beam Shuttering.		Metre		
i	Ground Floor	52.00	Cubic Metre		
ii	First Floor	37.00	Cubic Metre		
iii	Terrace Floor	33.00	Cubic Metre		
d	Slab Shuttering	783.00	Square metre		
е	Lintel Shuttering	9.00	Cubic Metre		
f	Staircase Shuttering	56.00	Square metre		
g	Chajja Shuttering	34.00	Square metre		
h	Cill Shuttering	64.00	Square		
		01.00	metre		
6	DESIGN MIX CONCRETE				
	Supply and placing of the M-25 Grade Design Mix Concrete corresponding to IS 456 using WEIGH BATCHER / MIXER with 20mm size graded machine crushed hard granite metal (coarse aggregate) from approved quarry including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site and including Seigniorage charges, sales & other taxes on all materials including all operational, incidental and labour charges such as weigh batching, machine mixing, laying concrete, curing etc., complete excluding the cost of hiring & erecting charges for CENTERING, shuttering & SCAFFOLDING & steel and its fabrication charges for finished item of work with minimum cement content as per IS code from standard suppliers approved by the department including pumping, cantering, shuttering, laying concrete, vibrating, curing etc. complete but excluding cost of steel and its fabrication charges for finished item of work. for COLUMNS, LINTELS, WATER TANKS, RCC WALLS IN BUILDINGS for:-Columns-Design Mix: M-20(Weigh Batch) Centering with Wood upto 3.66 Lift Machinery.				
а	Foundation	90.00	Cubic Metre		
b	Ground floor	189.00	Cubic Metre		
С	First Floor	115.00	Cubic Metre		
d	Terrace Floor	3.00	Cubic Metre		
7	Refinforcement Steel - Fe 500		MOUE		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
	Supply, fabrication and placing of reinforcement steel of high yield strength ribbed bars of various diameters and grade conforming to IS 1786 for reinforced concrete work. The work includes decoiling, straightening, cutting, bending, fabricating, and placing in position, at all levels including lead and lift, according to drawings, specifications etc. complete and supply & use of 18G black annealed binding wire double fold to tie the bars in position, chairs, pins, spacer bars unauthorised laps which will not be measured separately neither for payment nor for reconciliation and providing precast cement/ PVC cover blocks for main reinforcement to ensure specified cover and including all labour charges etc as directed by departmental officers.	45950.00	Metric tonnes		
8	ONE BRICK THICK MASONRY: Providing and constructing 230 mm thick brick walls in CM 1:5 (one part of Cement, five parts of River sand) using Table moulded, Chamber burnt, Stock Bricks having minimum of 35kg/cm2 compressive strength and of size 9" x 4 1/2 " x 3" including curing, scaffolding ,materials, labours, tools & plant etc. complete.				
а	Ground Floor	68.00	Cubic Metre		
b	First Floor	82.00	Cubic Metre		
С	Terrace Floor	33.00	Cubic Metre		
9	HALF BRICK THICK MASONRY: Providing and constructing 110mm thick (Plus or minus 5mm) brick masonry in cement mortar 1:3 for partition walls using well burnt best quality bricks having minimum of 35kg/cm2 compressive strength including supplying and laying 1 No 6mm dia MS bars at every fourth layer including scaffolding curing cost of reinforcement etc. all complete as per specifications and drawings as directed by the Engineer in-charge.				
а	Ground Floor	802.00	Square metre		
b	First Floor	612.00	Square metre		
10	Plastering to RCC surfaces: Plastering to RCC surfaces like ceilings 12 mm thick in two coats with base coat of 8 mm thick in cement mortar 1:5 proportion and top coat of 4 mm thick in cement mortar 1:3 proportion with dubara sponge finishing, including cost and conveyance of all materials to site, cost of seigniorage charges on materials, all taxes and all operational, incidental labour charges such as mixing mortar, curing, scaffolding, lift charges etc., complete and cutting grooves as directed by the Engineer - in - Charge for finished item of work as per standard specification				
а	Ground Floor	425.00	Square metre		
b	First Floor	382.00	Square metre		
11	Plastering to Internal walls: Providing & applying 15 mm thick cement plaster in CM 1:4(1 part of cement: 4 parts of sand) to walls internally in single coat at all levels to correct line and level including chicken wire mesh at all joints of brick and concrete surfaces with minimum overlap of 150 mm in all directions, scaffolding, rounding off or chamfering of corners, offsets,fin/ bands, projections,etc.and cleaning of surface,raking out joints, roughening of surface, chiseling the undulated surface wherever necessary, with smooth finish with lime rendering and curing, etc.,(all materials and labour complete in all respects including all lead, lift and descent and as directed).				
а	Ground Floor	1412.00	Square metre		
b	First Floor	1043.00	Square metre		
12	Plastering to External walls: Providing & applying 20 mm thick cement plaster in CM 1:5(1 part of cement:5 parts of sand) to walls externally in single coat at all levels to correct line and level including steel scaffolding, rounding off or chamfering of corners,offsets, fin/ bands,projections, etc.and cleaning of surface,raking out joints, roughening of surface,chiseling the undulated surface wherever necessary and curing, etc.,(all materials and labour complete in all respects including all lead,lift and descent and as directed).	1615.00	Square metre		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
13	PLASTER MESH: Providing and fixing suitable plaster mesh manufactured out of hot dipped galvanised iron of nominal thickness 0.35mm with a zinc coating of 120gms per sqm width, along route of walls chipped for services, junction between RCC and brick walls including cost of materials, labour for fixing complete as per specifications. (length of mesh only be measured for payment) suitable plaster mesh 200mm wide.		Meters		
14	CEMENT CONCRETE FLOORING				
	Providing, machine mixing and laying on the P.C.C/ R.C.C. surface in approved panels, 40 mm thick Cement Concrete flooring in a mix of 1:2:4 (1 Cement: 2 Sand: 4 Aggregate 10 to 12 mm thick) well vibrated, compacted finished to the correct level and finished rough and cured by keeping surfaces well-covered and protected against sun and heat. (The contractor to provide for preparation of surface by cleaning, hacking and exposing aggregate to achieve the best bond).		Sq.m		
14	Providing & laying <u>full</u> <u>body</u> <u>vitrified</u> <u>tiles</u> flooring of Naveen/ Johnson/ Kajaria/ Somany makes and of marble shades (colour and shade as selected by Architect/ Trust) and of size 600 mm x 600mm x 10mm or of higher size in all floors and skirting over a base layer of cement mortar 1:3 (one cement and three sand), cement slurry with 3mm PVC spacers and grouting the joints with suitable grouting compound of mactching colour, curing etc. complete.(<u>Basic rate - minimum 500/sq.mtrs</u>). The item shall include applying POP after laying and clearing off the same after compeltion of all works and cleaning thoroughly all stains with acid wash. Skirting also will be measured on area basis only.	637.00	Square metre		
15	Supplying, laying and fixing in position Anti-skid ceramic tiles of size minimum 1 ft x 1 ft, approved quality and colour laid using CM 1:3 - 20 mm thk and cement slurry. Including cutting the tiles to the required size with special cutter where ever necessary and pointing the joints with coloured cement using 0.40 Kg / Sqm including finishing the flooring and pointing the joints flesh with tile surface etc. complete. (Basic rate - minimum 400/sq.mtrs)	105.00	Square metre		
16	Dadooing the walls with coloured glazed tiles of minimum 12"x18" size and of approved quality and colour set in CM 1 : 2 - 10 mm thk and cement slurry. And pointed with suitable cement including finishing the joint and pointing flush with walls and tile surface in all floors at the rate of 0.40 Kg /Sqm etc. complete. (Basic rate-minimum 400/sq.mtrs).	420.00	Square metre		
17	Flooring with Tandoor blue or kota stone slab of size 600 x 600 of 25mm (top side pre-polished and other side un-polished) in all floors, skirting, steps and other area laid in of cement mortar 1:4 (one cement four sand), 25mm thick and pointed with color cement neatly including polishing with polishing stone and oxalic acid etc., so as to perfect & even and smooth glossy surface and including hire charges for polishing machine and power consumption charges etc. The kota stone slabs and other materials to be used shall be got approved by the architect / Trust officials before using in the work, etc., complete as per standard specification. (Staircase, front entrance, Kitchen, Wash Area) (Kota stone basic rate - 500/sq.mtrs)		Sq.m		
18	Supply and fixing of pre-polished granite slab of 19 mm thick (average) of approved shade/colour for flooring including fixing in position cutting, chipping the wall, masonry touch up works etc.fixed with 20mm thick cement mortar 1:3 and cement slurry, complete in all respects for all floors as directed by the Trust officials.(Kitchen Plat form, Wash Basin Counter) (Granite basic rate- minimum 1200/sq.mtrs).	30.00	Square metre		
19	Providing and laying 40 mm thick ruby red granit e on existing supports with bed of CM 1:3, joints pointed with colour pigment, including full rounding for nosing, flaming the ruby red granite for 50mm wide curing etc., complete.		Square metre		
20	Providing & fixing 25 mm average thick Machine cut polished Cuddpah or Kota or similar natural stone slabs, normally having width of 1'6" to 2 ft and length from 4 ft to 5 ft for Kitchen store shelves and for Dormitory built-in storages. The slabs shall be fixed to the walls to proper wall with necessary civil works. The rate is per unit surface area of the slabs provided	45.00	Square meters		
21	Providing, fabricating and fixing M.S. grills for Windows and ventilators as per the tender drawing and to the following specifications. The grill shall be made out of 12 mm square solid M.S bars spaced at 4" cente to centre in horizontal direction and 8" centre to centre in vertical direction. There shall be alround MS frame & intermediate frame at every 2'6" space or part htereof in both directions and shall be made of MS flat of 32mm x10mm thickness etc. The item shall include necessary welding, grinding, fixting to the masonary wall using Cement concrete and cement mortar 1:4 proportion complete as per detailed drawings and specifications and as directed by the Engineer.		square metre		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
22	SS Hand Rail: Providing and fixing Staineless steel (SS) pipe handrail having 1200 mm hieght (as shown in the TENDER drawing) made out of 3" outer dia for top rail (with 1.6mm wall thickness) and 2.0" dia (1.6mm wall thickness) SS pipes placed vertically at a spacing not exceeding 900 mm and 3 nos horizontal SS pipes of 0.5" diameter (with 1.2mm wall thickness) welded at equi-distance distance fixed to the surface with necessary civil works (at all floors levels staircase & Ramp areas) with necessary bends, flanges and base plates. Rate is inclusive of all materials, labours, lead, lift,etc. as per tender drawing and as directed by Engineer in-charge.		Running metre		
23	ALUMINIUM WINDOWS, VENTILATORS: Providing and fixing aluminium (50 micron thick powder coated of approved colour) of below mentioned type track Sliding windows and Aluminium Ventilator with fixed glazing using standard design and sections compling to 'INDAL, Specification for sliding section with necessary accessories as specified in Architectural drawing including all fittings,fixtures,locking device aluminium mesh, handle etc,complete, as directed by Architect. The shutter panels shall be provided with 6mm thick plain glass of Saint Gobian or Asahi make with rubber gasket beadings.				
а	Two track sliding windows (for class rooms, work sheds, bath rooms, comon areas and ventilators). Frame section bottom, Top and side - section bottom, Top and side - 62x45.5x1.5mm, Shutter section - bottom, Top and side - 40x18x1.5mm		sq.mt		
b	Three track sliding windows (for Office, Dormitories, raculty rooms areas only). Frame section bottom, Top and side - 92x45.5x1.5mm, Shutter section - bottom, Top and side -92x45.5x1.5mm. There shall be one mosquito meshed shutter using SS material mesh for each window in addition to the glass panes shutters shall be provided. sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having an overall size of 108mm width x 45mm height with reinforcement of 1mm thickness and Sash with overall size of 39mm x 75mm with GI reinforcement of 2mm and mesh sash of size 37mm x 58mm. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24 mm. Windows shall be provided with 6mm plain float glass, standard hardware& Multi point locking system with touch loDesign Mix: M-20(Weigh Batch) Centering with Wood upto 3.66 Lift Machinery. Lift Machinery.		sq.mt		
		10.00	5 q .mt		
	Providing & fixing of louvered ventilator made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free with gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the ventilator frame. The frame having overall size of 39mm x 39mm with GI reinforcement of 1mm thickness.Louver clip in Aluminium (powder coated in white) will be used on the frame along with plastic parts for fixing the 4 mm pin head glass. Wall thickness of frame shall be 2mm.Maximum possible size – 1000mm x 1000mm.(The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made)	8.00	Square metre		
25	Providing Salwood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications.	1 90	Cubic Metre		
	Fixing of door frame in an existing opening including embedding frame in floor and walls after cutting masonry for holdfasts for embedding holdfast in cement concrete 1:3:6 of 20mm and down size granite metal painting two coats of coal tar to sides of frame, making good the damages to walls and floor as required and disposal of the debris with lead upto 50 m. including cost of materials, labour charges, complete as per specifications.	26.00	Each		
27	Providing and fixing flush door shutter made out of solid core block board type, well seasoned, chemicaly treated hard wood battens and internal frame with minimum 45 mm wide wooden frame alround door shutters covered with cross bonded wooden sheets (core veneer) hot pressed and fastened on both sides of the door useing liquid phenol formaldehyde resin as per IS specifications 2202 (part-I) 1991.from manufacturer complete as per spcificationdo- 30 mm thick both side Teak	56.00	Square metre		

DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
Providing and fixing 65mmX125mm GRP Doorframe fabricated using E-Glass Chopped Strand Mat (CSM). U.V-stabilized Isopthalic Gelcoat and Isopthalic resin. The thickness of the GRP skin shall not be less than 2.0mm. The doorframe consists of four segmens, which are provided with plug-in-socket arrangement in-situ in the mould. The segments are plugged in ad are joined together by means of screws. The GRP frame shall be provided with wooden reinforcement of 6 locations for high screw holding capacity for fixing metallic hold fast and shall be consolidated by filling with medium density foam/Plaster with fibre reinforcement. Six numbers of 260mmX25mmX5mm size 'S' shapped M.S. flat hold fast shall be provided with the frame. (Old SR P. 63/9.96)	120.00	Rmt		
Providing and fixing factory made single leaf rigid GRP Sandwich composite door shutter of 32mm thick, laminated with two GRP skins with wood grain finish, fabricated using U.V. stabilized Isopthalic Gelcoat and one layer of 450 gms E-glass Chopped Strand Mat (CSM), impregnated with orthopthalic polyester resin. The thickness of the skins shall not be less than 1.5mm Expanded Polystyrene (EPS) structural foam panel of 29mm thickness and a density of 20 kg/m3 shall be used as core material. Wooden reinforcements made of Seasoned Salwood block of cross section not lessthan 28mmx32mm and also necessary salwood reinforcements for fixing the metal fittings such as tower bolts, aldrops, handles, etc. shall be provided. A structural adhesive compatible with EPS foam shall be used for bonding the core material, the salwood reinforcement and the skins. The material and process for manufacturing the door shutters shall confirm to RV-TIFAC Composites Design Centre Standards and specifications and the door shutters tested in confirmation to IS 4020-1994. The finish of shutter will be plain colour white/IVORY/beige/light grey or any other colour using high quality pigments. Excluding cost of fixtures and inclusive of supply of shutters to respective work sopt.(Old SR P.62/9.93)	41.00	Square metre		
CINDER FILLING IN SUNKEN AREAS: Providing, filling the Toilet/bath rooms sunken areas using approved quality cinder (industrial waste slag) or broken brick jelly 20 mm gauge. The proportion of broken brick jelly to slaked lime being 1:3:6 (1 part cement,3 part fine aggregate & 6 part broken brick jelly), in 6" layers, well beaten by wooden beaters for giving required slope and thickness required etc complete complying with standard specifications and as directed by Departmental Officers.	13.00	Cubic Metre		
DAINTING WORKS				
Providing and applying two coats of synthetic Enamel paint of approved colour, shade and make over a coat of anti corrosive Zinchromite primer on the new steel work , after suitably preparing the surfaces for receiving the new paint by surface scraping, rubbing applying filler, cleaning the paint drop stains after completion painting works etc. including cost of filler, primer, paint all complete as per specifications.	99.00	Square metre		
Providing and applying two coats of synthetic Enamel paint of approved colour, shade and make over a coat of of wood primer over the new wood surface, after suitably preparing the surfaces for receiving the new paint by surface scraping, rubbing applying filler, cleaning the paint drop stains after completion painting works etc. including cost of filler, primer, paint all complete as per specifications.	56.00	Square metre		
Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete as per specifications and as per directions of Engineer in charge.	0047.00	Square metre		
Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge		Square metre		
Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two coats on new work after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	2847.00	Square metre		
	Chopped Strand Mat (CSM). U.V-stabilized Isopthalic Gelocat and Isopthalic resin: The thickness of the GPR skin shall not be less than 2.0mm.The doorframe consists of four segments, which are provided with plug-in-socket arrangement in-situ in the mould. The segments are plugged in ad are joined together by means of screws. The GRP frame shall be provided with wooden reinforcement of 6 locations for high screw holding capacity for fixing metallic hold fast and shall be consolidated by screws. The GRP frame shall be provided with wooden reinforcement. Six numbers of 260mm/25mm/Smm size 'S' shapped M.S. flat hold fast shall be provided with the frame. (Old SR P. 639.96) Providing and fixing factory made single leaf rigid GRP Sandwich composite door shutter of 32mm thick, laminated with two GRP skins with wood grain finish, isbrictated using U.V. stabilized Isophalia Celcoat and one layer of 450 gms E-glass Chopped Strand Mat (CSM), impregnated with orthopthalic polyester resin. The thickness of the skins shall not be less than 1.5mm Expanded Polystyrene (EPS) structural foam panel of 29mm thickness and a density of 20 kg/m3 shall be used as core material. Wooden reinforcements made of Seasoned Salwood block of cross section not lessthan 28mmx2mm and also necessary salwood reinforcements for kinding the metal fittings such as tower bolts, aldrops, handles, etc. shall be provided. A structural adhesive compatible with EPS foam shall be used for bonding the core material, the salwood reinforcement and the skins. The material and process for manufacturing the door shutters shall confirm to RV-TIFAC Composites Design Centre mentrial, the salwood reinforcement and the skins. The material and process for manufacturing the door shutters shall confirm to RV-TIFAC Composites Design Centre manufacturing the object in the salwood reinforcement and the skins. The material and process for manufacturing the form the salver of the	Chopped Strand Mat (CSM). UStabilized Isopotalic Gelcoat and Isophialic resin:The thickness of the GRP skin shall not be less than 2.0mm.The doorfarem consists of four segmens, which are provided with plug-in-socket arrangement in-situ in the mould. The segments are plugged in ad are joined together by means of screws. The GRP frame shall be provided with wooden reinforcement of 6 locations for high screw holding capacity for fixing metallic hold fast and shall be consolidated by filling with medium density foam/Plaster with fibre reinforcement. Six numbers of 280mmX25mm/Smm size St shapped M.S. flat hold fast shall be provided with the frame. (Old SR P. 63/9.96) Providing and fixing factory made single leaf rigid GRP Sandwich composite door shutter of 32mm thick, laminated with two GRP skins with wood grain firish, altoricated using U.V. stabilized Isophialic Gelcotes and one layer of 450 gms E-glass Chopped Strand Mat (CSM), impregnated with orthophalic polyester resin. The hickness of the skins shall not be less than 1.5mm Expanded Polystyrene (EPS) structural foam panel of 29mm thickness and a density of 20 kg/m3 shall be used as core material. Wooden reinforcements made of Seasoned Salwood block of cross section not lessthan 28mmx32mm and also necessary salwood reinforcements for fixing the metal fittings such as tower botts, alforeps, handles, etc. shall be provided. A structural adhesive compatible with EPS foam shall be used for bonding the core material, the salwood reinforcements and the skins. The material and process for manufacturing the door shutters shall confirm to RV-TIFAC Composites Design Centre Standards and specifications and the door shutters tested in confirmation to 18 402-194. The finish of shutter will be plain colour white/WORY/beige/light grey or any other colour using high quality prigments. Excluding cost of fixures and inclusive of supply of shutters to respective work sopt.(Old SR P.62/9.93) CINDER FILLING IN SUNKEN AREAS: Providing, filling the Toilet/bath rooms sunken areas	Chopped Strand Mat (CSM). U.V-stabilized Isopthalic Gelcoat and Isopthalic resin: The thickness of the GRP skin shall not be less than 2.0mm. The doorfarme consists of four segmens, which are provided with plug-in-socket arrangement in-stru in the mould. The segments are plugged in ad are joined together by means of screws. The GRP trame shall be provided with wooden reinforcement of 6 locations for high screw holding capacity for fixing metallic hold fast and shall be consolidated by filling with medium density foam/Plaster with fibre reinforcement. Six numbers of 280mm/ZSmm/Smm Size S's happed M.S. flat hold fast shall be provided with the frame. (Old SR P. 639.96) Providing and fixing factory made single leaf rigid GRP Sandwich composite door shutter of 32mm thick, laminated with two GRP skins with wood grain finish, labinciated using U.V. stabilized Isopthalic Gelcoat and one layer of 450 gms E-glass Chopped Strand Mat (CSM), impregnated with orthopthalic polyseter resin. The thickness of the skins shall not be less than 1.5mm Expanded Polystyrene (EPS) structural adheristic companies and soft of Seasoned Salwood block of cross scent material. Wooden reinforcements ande of Seasoned Salwood block of cross section not lessthan 22mm/Szmm and also necessary salwood reinforcements for loring the metal fittings such as tower botts, aldrops, handles, etc. shall be provided. A structural adhesive compatible with EPS foam shall be used for bording the core material, the salwood reinforcement and the skins. The material and process for meanufacturing the door shutters shall confirm for WTFTRAC Composites Design Centre Standards and specifications and the door shutters the skill on confirmation to 18 4020-1944. The finish of shutter will be plain colour wither WTGP Weglepflight grey or any other colour using high quality pigments. Excluding cost of fixtures and inclusive of supply of shutters to respective work sopt. (NG SR P.629.93) CINDER FILLING IN SUNKEN AREAS: Providing, filling the Toilet/bath propers and the	CRIDER FILLING IN SUNKEN AREAS: Providing, Illing the Tolethath tooms surker material and specifications and

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
36	Supplying and painting the exterior walls with one coat of wall primer and two coats of Acrylic Exterior emulsion (ACE quality of Asian paints or its equivalent) as per manufacturers specifications including preparation of surface, curing the primer coat and including Scafolding, cleaning the paint drop stains after completion painting works etc., complete in all floors complying with standard specifications (The colour and shade of the paint shall be got approved by the Architect/ Engineer before use).	1800.00	Square metre		
37	Providing & laying Weathering Proof Course (WPC) as per the following specifications. This Water proofing work shall be guaranteed for minimum of five years period for water tightness.				
38	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with waterproofing compound conforming to IS: 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick jointless cement mortar of mix1:4 (1 cement: 4 coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge: With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	490.00	Square metre		
38	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying: a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound@ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b)Second layer of slurry of cement @ 0.242 kg/sqm mixed with waterproofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry. This Water proofing work shall be guaranteed for minimum of five years period for water tightness.	220.00	Square metre		
39	UNDER GROUND SUMP TANK: Approximate Size 2.1x3.3x1.8 - 12500 Its capacity				
	Providing and constructing an underground sump of the given capacity as per the given drawings. The sump will have the necessary waterproofing and provision of inlet and outlet pipes. The sump will have to be constructed with 9" thick brick masonary walls finished with chicken wire mesh plastering with water proofing compound admixture on both surfaces and resting upon 4" thick PCC 1:3:6 bed, finished with 1:2:4 flooring laid to the required slope with smooth finish as detailed. The rate is also to be inclusive of providing top cover slab of 6" thk made of M25 RCC for the sump, complete with provision of manhole cover frame fixing. The item shall include the cost of providing and fixing access cover made of heavy duty CI chamber cover 2' x2' and the rate shall be inclusive of fixing and finishing this chamber cover. The rate should include disposal of surplus earth and providing and fixing M.S. steps inside the sump etc complete. The rate is based on the internal capacity of the tankested in co	12500.00	Litres		
40	UNDER GROUND SEPTIC TANK and SOAK PITS as per drawings - Approximate capacity 12500 Its capacity Constructing septic tank of 2.1 mtrs x 3.3 mtrs x1.8 mtrs approximate size including excavation, PCC 1:3:6, 9" thick Brick walls, plastering with cement punning and top cover slab of 6" thick M25 grade RCC slab including recinfreement all complete in all respect. The drawing of septci tank may please be referred. The item shall also	1.00	Set		
	include one soak pit construction as per the tender drawing.				

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
41	MONO BLOCK PUMP :Supply, Erection testing and commissioning of SUGUNA or V GUARD or equivalent ISI make Single phase MONOBLOCK type water pumps 1.5 HP capacity with required electrical and plumbing connections for water pumping from UG sump to OHT Tank [For Raw water]	1.00	Each		
42	5000 LITRES SINTEX PVC OVER HEAD WATER TANK: Supply & Fixing of PVC Tank of 5000 litres capacity of SINTEX make only at the client specified location at staircase head room of terrace floor or as specified in the drawing. The rate is inclusive of transporting and lifting connecting the inlet and outlet plumbing pipes etc complete.	2.00	NOS		
43	ROLLING SHUTTER: Supplying and fixing rolling shutters of approved make, made of 80 mm x 1.25 mm M.S. laths with 1.25 mm thick top cover. M.S. laths shall be interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 part 1 and M.S. top cover of required thickness for rolling shutters.		Square metres		
	SUB-TOTAL OF MAIN BUILDING WORKS (A)				
D	COMPOUND WALL				
1 1	COMPOUND WALL COMPOUND WALL WITH PRECAST POLES AND PRECAST INSEERTION TYPE SLABS (Except entrance area): Providing and fixing the compound wall using precast concrete poles and slabs as per the following specifications.				
a	PRECAST CONCRETE POLES: Supply, erecting and fixing in position 2 metres height H type Pre-Cast RCC Poles/Posts with required main reinforcement & stirrups having grooves on sides for pre cast slabs insertion. The post shall be of minimum 150mm x150 mm Size and fixed at 2 metres regular intervals. Each pole shall be fixed in the existing ground by making digging pits of 18 inches x 18 inches x 24 inches deep with necessary excavation in all types of soils inclding hard rock, providing base concrete and filling conrete of M20 grade upto 6 inches height above the natural ground level, curing the concrete etc all complete.				
b	PRECAST CONCRETE SLABS 50 MM THICK: Providing and fixing in position1800 mm (L) x 300 mm (W) x 50 mm (T) size pre-cast reinforced concrete slabs in 5 layers for a height of 5 feet one above the other, by caerfully inserting into the grooves of the Precast concrete poles/ Posts including the cost of materials and labour charges etc, complete. The rate is per running metre of the compound wall which shall include the cost of poles and precast slabs, making earth pits, poles fixing etc all complete.				
		150.00	Metres		
2	BARBED WIRE FENCING: Providing and fixing the Galavanised Iron MS barbed wire fence of 10 guage by inserting it thorught the holes of the precast RCC poles and tying with 18gauge non rusting binding mild steel wire. The payment is per running metre of the barbed wire provided & fixed.		Metres		
	Front Masonry Compound wall				
3	Earthwork in all soils & soft rock & earth refilling: excavation for foundation (for narrow excavation) to full depth as per design in all soils including soft disintegrated rock not requiring blasting and bailing out water wherever necessary. The item shall also include refilling the sides of foundation with excavated earth and otehr earth available within the campus in layers with well ramming and compacted and depositing the surplus earth in places shown by the departmental officers with an initial lead of 10m and initial lift of 2m and clearing and leveling the site etc. complete complying with standard specification.		Cubic Metre		
4	Earth work in Hard rock: Excavation for foundations for buildings in hard rock using Compressor machines, hydraulic machines (blasting prohibited) and depositing on bank for all lifts and with an initial lead-1 of 10m and up to 3m depth including all operational, incidental, labour charges such as shoring, sheeting, planking, strutting etc., and overheads & contractors profit complete for finished item of work excluding seigniorage excluding de watering charges etc.,		Cubic Metre		
5	Plain Cement Concrete (1:4:8) (cement: fine aggregate: Coarse aggregate) for foundations and under flooring bed using coarse aggregate 40mm size hard, machine crushed granite from approved quarry including cost and conveyance of all materials like cement, sand, coarse aggregate, water etc. to site including all charges for machine mixing, laying concrete in foundations and under flooring bed, ramming in 15 cm layers finishing top surface to the required level curing etc., and overheads & contractors profit complete for finished item of work.		Cubic Metre		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
6a	CREATING COLUMN FOUNDATION IN HARD ROCK STRATA (to be operted only in locations where the land is with full of rocky strata and excavation even for a depth of 1 feet from existing ground surface is difficult): Providing foundation bed in open shallow lelvel hard rocky strata by drilling 25mm diameter holes in the rock using hydraulic bore to a depth of atlest 2 feet from the surface at every 12 inches interval in both the directions. The item shall include providing & inserting 20 mm diameter reinforcement rods to the full depth of the holes, firmly fixed with Fosroc make bonding chemical in the gaps. The same steel rods shall be projected out above the surface level and then bended to the sideways for atleast to 2 feet horizontal length to have bonding with footing mat steel and M25 concrete. The column bed shall be minimum of 3ft x 3 ft x 6 inches depth laid with M25 concrete. The footing mat shall be made of 12 mm dia rods spaced at 5" centre to centre in both directions. The payment is per unit surfaceested in confirmation to IS 4020-199		Square metres		
7	Earth Filling (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 up to 2.5 m, by earth available within the campus.		Cubic Metre		
8	Supplying and Erecting centering & shuttering for sides and soffits including supports and strutting up to 3.30 m height with all cross bracing for plane surfaces as detailed below, using mild steel sheets of 90 X 60 cm 10 gauge stiffened with MS angle of 25 x 25 x 3mm for boarding, laid over adjustable span & jacks and supported by 50mm dia pipes for general pipes scaffolding systems @ a spacing of 1.20m c/c and vertical connected at a height of 2.0m c/c including 'C' & 'U' clamps and base receiver cup at bottom for connecting pipes etc and removable systems etc complete				
a b	Footing, plinth beam, etc. Columns	4.0 3	sq.m sq.m		
9	DESIGN MIX CONCRETE				
	Supply and placing of the M-25 Grade RMC or Design Mix Concrete corresponding to IS 456 using WEIGH BATCHER / MIXER with 20mm size graded machine crushed hard granite metal (coarse aggregate) from approved quarry including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site and including Seigniorage charges, sales & other taxes on all materials including all operational, incidental and labour charges such as weigh batching, machine mixing, laying concrete, curing etc., complete Excluding the cost of hiring & erecting charges for CENTERING, shuttering & SCAFFOLDING & cost of steel and its fabrication charges for finished item of work with minimum cement content as per IS code from standard suppliers approved by the department including pumping, cantering, shuttering, laying concrete, vibrating, curing etc. complete but excluding cost of steel and its fabrication charges for finished item of work. for COLUMNS, LINTELS, WATER TANKS, RCC WALLS IN BUILDINGS for:-Columns-Design Mix: M-20(Weigh Batch) Centering with Wood upto 3.66 Lift Machinery.		cubic metre		
9B	Supply and placing of the M-20 Grade Design Mix Concrete corresponding to IS 456 using WEIGH BATCHER / MIXER with 20mm size graded machine crushed hard granite metal (coarse aggregate) from approved quarry including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site and including Seigniorage charges, sales & other taxes on all materials including all operational, incidental and labour charges such as weigh batching, machine mixing, laying concrete, curing etc., complete excluding the cost of hiring & erecting charges for CENTERING, shuttering & SCAFFOLDING & steel and its fabrication charges for finished item of work with minimum cement content as per IS code from standard suppliers approved by the department including pumping, cantering, shuttering, laying concrete, vibrating, curing etc. complete but excluding cost of steel and its fabrication charges for finished item of work. for COLUMNS, LINTELS, WATER TANKS, RCC WALLS IN BUILDINGS for:-Columns-Design Mix: M-20(Weigh Batch) Centering with Wood upto 3.66 Lift Machinery.				
а	Foundation and basement	1.09	cubic metre		
b	Ground floor	2.03	cubic metre		
10	Refinforcement Steel - Fe 500 Supply, fabrication and placing of reinforcement steel of high yield strength ribbed bars of various diameters and grade conforming to IS 1786 for reinforced concrete work. The work includes decoiling, straightening, cutting, bending, fabricating, and placing in position, at all levels including lead and lift, according to drawings, specifications etc. complete and supply & use of 18G black annealed binding wire double fold to tie the bars in position, chairs, pins, spacer bars unauthorised laps which will not be measured separately neither for payment nor for reconciliation and providing precast cement/ PVC cover blocks for main reinforcement to ensure specified cover and including all labour charges etc as directed by departmental officers.		Kg		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
11	ONE BRICK THICK MASONRY: Providing and constructing 230 mm thick brick walls in CM 1:5 (one part of Cement, five parts of River sand) using Table moulded, Chamber burnt, Stock Bricks having minimum of 35kg/cm2 compressive strength and of size 9" x 4 1/2 " x 3" including curing, scaffolding materials, labours, tools & plant etc. complete.	5.00	cubic metre		
12	HALF BRICK THICK MASONRY: Providing and constructing 110mm thick (Plus or minus 5mm) brick masonry in cement mortar 1:3 for partition walls using well burnt best quality bricks having minimum of 35kg/cm2 compressive strength including supplying and laying 1 No 6mm dia MS bars at every fourth layer including scaffolding curing cost of reinforcement etc. all complete as per specifications and drawings as directed by the Engineer in-charge.		square metre		
13	Plastering to External walls: Providing & applying 20 mm thick cement plaster in CM 1:5(1 part of cement:5 parts of sand) to walls externally in single coat at all levels to correct line and level including steel scaffolding, rounding off or chamfering of corners,offsets, fin/ bands,projections, etc.and cleaning of surface,raking out joints, roughening of surface,chiseling the undulated surface wherever necessary and curing, etc.,(all materials and labour complete in all respects including all lead,lift and descent and as directed).	51.06	sq.m		
14	Providing & fixing Entrance M S gate strictly as per Tender drawing with necessary welding, rivetting, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position all complete: as per the directions of Engineer In Charge and Drawings.	18.20	Square metre		
15	Supplying and painting the exterior walls with one coat of wall primer and two coats of Acrylic Exterior emulsion (ACE quality of Asian paints or its equivalent) as per manufacturers specifications including preparation of surface, curing the primer coat and including Scafolding, cleaning the paint drop stains after completion painting works etc., complete in all floors complying with standard specifications (The colour and shade of the paint shall be got approved by the Architect/ Engineer before use).		sq.m		
	CHE TOTAL OF COMPOUND WALL WORKS (B)				
	SUB TOTAL OF COMPOUND WALL WORKS (B)				
С	PLUMBING & SANITARY WORKS				
1	PART-I: SANITARY FITTINGS Providing and fixing white vitreous china floor mounted water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern model Sleek essence dual of Hindware, including flush pipe, with manually controlled device conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required Hindware Cat No 20044.	11.00	Each		
2	Supplying and fixing white colour glazed Indian water closet , Orissa pattern Parryware or equivalent with P or S trap having 100mm dia outlet and 50mm deepwater seal, embedding trap and water closet fixed in position using cement concrete in 1:4:8 mix.		Each		
3	Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of WHITE coloured vitreous china under counter Regular rectangular WASH BASIN with brackets / G.I. rag bolts and nuts painted, 32mm dia brass C.P. waste coupling, (heavy), waste pipe , 15mm dia brass C.P. Angle stop cock with flange, 15mm dia brass C.P. cold water connecting pipe, etc., The work shall include,required extension nipples, cutting / chasing and making good the walls and floors - toilets.	15.00	Each		
4	Supplying and fixing in position 15 mm dia Brass Chromium Plated health faucet with 1Meter length flexible hose with necessary CP fixing nuts of approved make conforming to IS specification and quality including cost of shellac, thread, cutting and threading wherever necessary etc., complete complying with standard specification and as directed by the Departmental officers.		Each		
5	Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of WHITE coloured vitreous china under counter Urinal with brackets / G.l. rag bolts and nuts painted, 32mm dia brass C.P. waste coupling, (heavy) 32mm dia brass C.P. bottle trap, 15mm dia brass C.P. Angle stop cock with flange, 15mm dia brass C.P. cold water connecting pipe, waste pipe etc., The work shall include,required extension nipples, cutting / chasing and making good the walls and floors - toilets.		Each		
6	Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of stainless steel sink with single bowl with drain board supported by C.I./M.S. painted white brackets, C.P. cast brass bottle trap with extension piece, rubber adaptor, wall flange, union, C.P. brass chain rubber plug, including cutting and making good the wall/floors wherever required.	1.00	Each		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
	Suppling and fixing in position 15mm.diameter brass / C.P screw down tap / pillar tap / long body bib cock (heavy duty) of approved make conforming to I.S.specifications and quality including cost of shellac , thread etc.complying with standard specifications and including cutting and threading wherever necessary (Taps should be got approved by the executive Engineer before use on thework.(Metro make)				
	C.P. short body Bib cock	33.00	Nos		
b	C.P. Long body Bib cock tap (Kitchen Sink)	6.00	Nos		
С	C. P. Pillar cock	15.00	Nos		
	DADT ILCOLL WASTE AND VENT DIDE LINES				
8	PART - II SOIL, WASTE AND VENT PIPE LINES Supply and fixing in position best quality PVC IS 4985 - CLASS- III - 6 Kg/Sqcm -Soil/ waste pipes of various size with approved quality and variety of various size confirming having ISI mark and providing leak proof joints including fixing to the wall with special PVC /MS clamps, etc., and making connection to all sanitary fittings, wherever necessary and making chipping good portion to the original condition, complying with standard specification etc., complete.				
	40mm dia. 6kg class PVC pipes.	26.00	Rmt		
	50mm dia. 6kg class PVC pipes.	20.00	Rmt		
С	75mm dia. 6kg class PVC pipes.	70.00	Rmt		
d	110mm dia. 6kg class pipes.	28.00	Rmt		
	Supplying and fixing in position Supreme/ Prince make PVC material Nahini / Floor trap with PVC grating / PVC nahini / Floor Trap with PVC Grating type of size 100 x 75 / 75 x 50 mm with best quality gratings of approved brand fixed over a bed of brick jelly lime concrete 1;2;5(One lime two sand and five aggregate) brick jelly 40mm and finishing with cm 1;3(One cement and three sand) including dismantling masonary wherever found necessary and making good to the original condition and giving connections to the cast iron pipe etc, complete complying with standard specification and as directed by the departmental Officers.	30.00	Each		
10	Supply and fixing in position best quality PVC IS 4985 - CLASS-II - 6 Kg/Sqcm -Rain water pipes of various size having ISI mark and providing leak proof joints with such as Bend, Tee Junction, door etc.,of approved qualityincluding fixing,Scafolding to the wall with special PVC /MS clamps, etc., and making connection to all sanitary fittings, wherever necessary and making chipping good to the original condition, complying with standard specification etc.,complete.				
	75mm dia. 6kg class PVC pipes.	3.30	Rmt		
b	110mm dia. 6kg class pipes.	46.20	Rmt		
11	Supplying and fixing in position of the following dia PVC rain water gratings for rain water pipes ,of approved quality and variety of various size confirming to ISS and including necessary cutting and fixing and giving connection to PVC pipes etc., complete complying with standard specification and as directed by the Departmental Officer.				
а	75mm dia. 6kg class PVC pipes.	1.00	Each		
b	110mm dia. 6kg class pipes.	8.00	Each		
	Supplying and fixing in position of the following dia PVC specials such as PVC vent Cowl etc.,of approved quality and variety of various size confirming to BIS amend providing leak proof joint etc., including necessary cutting and fixing and giving connection to PVC pipes etc., complete complying with standard specification and as directed by the Departmental Officer.				
a b	75mm dia. 6kg class PVC pipes.	7.00	Each		
ט	110mm dia. 6kg class pipes.	5.00	Each		
	PART-III - EXTERNAL DRAINAGE				
	Supply and fixing in position best quality PVC IS 4985 - CLASS- III - 6 Kg/Sqcm -Soil/ waste pipes of various size with approved quality and variety of various size confirming having ISI mark and providing leak proof joints including erection of below ground with excavation and refilling etc., and making connection to Manholes / Gully trap, wherever necessary and making chipping good portion to the original condition, complying with standard specification etc., complete.				
а	160mm dia. 6kg class III-pipes.	45.00	Rmt		
14	Supply, laying and erction of glazed stone ware gully trap (100 x 75 mm) with 100 mm dia, outlet including embedding trap in cement concrete 1:3:6 and constructing chamber of size 300 x 300 mm inside clear in brick masonry 230 mm thick, plaster with water proof cement mortar (1:3) 15 mm thick on both internal and external surfaces inside finished with floating coat of neat cement. The work including excavation to required depth of gully trap and refilling and making good in the surface with Providing and fixing SFRC frame and cover 400 x 400 mm (clear opening) complete complying with std. specification.	6.00	Each		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
15	Supplying and Erection and construction of sewer chambers of required internal dimensions 600x600 upto 0.6 mtr.depth with 230mm brick masonry in C.M.1:5 thk of masonry over bed of 1:2:4 R.C.C. 200 mm thk bove 100 mm thk P.C.C.1;3:6 Cement concrete foundations over sand bed of 100mm thk channelling in 1;2:4 cement concrete, plastering in 1:3 cement mortar for internal and external surface finished with floating coat of neat cement, the work including excavation for required depth of gully trap and refilling and making good in the surface with SFRC cover and frame 600x600mm (clear opening)complete complying with standard specifications etc.,	12.00	Each		
	PART-IV-WATER SUPPLY SYSTEM				
	INTERNAL CONCEALED WORKS				
	Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (CPVC-SDR-11) Pipes conforming to IS 15778 having thermal stability cold water with brass and CPVC fittings like Elbow, Brass Tee, Brass Elbow, Offsets, Tee with clamps @1.00 meters spacing, with jointing of pipes with one step CPVC solvent cement with including Scafolding & cutting of chase including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies VAT etc all complete as per as per specifications, Concealed work including chase cutting)complete complying with standard specification and as directed by the Departmental Officer.				
	20 mm nominal (OD) pipes	150.00	Mtrs		
b	25 mm nominal (OD) pipes	30.00	Mtrs		
	EXPOSED PLUMBING WORKS Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (CPVC-SDR-11) Pipes conforming to IS 15778 having thermal stability cold water with brass and CPVC fittings like Elbow, Brass Tee, Brass Elbow, Offsets, Tee with clamps @1.00 meters spacing, with jointing of pipes with one step CPVC solvent cement with including Scafolding & cutting of chase including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies VAT etc all complete as per as per specifications, Exposed work including chase cutting, bracket fixing)complete complying with standard specification and as directed by the Departmental Officer.	000			
a b	20mm nominal(OD) pipes 25mm nominal(OD) pipes	QRO	M Mtrs		
С	32mm nominal(OD) pipes	200.00 150.00	Mtrs		
d	40mm nominal(OD) pipes	30.00	Mtrs		
е	50mm nominal(OD) pipes	25.00	Mtrs		
	Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (CPVC-SPEAR) Handle Valve or Gate valve with CPVC fittings with jointing of pipes with one step CPVC solvent cement with including cutting or chasing including testing of the joint complete and making good the walls etc., Rate is inclusive of all material,tools,and tackels taxes,levels etc., all complete with standard specifications and at directed by the Department Officer for both internal and external water supply arrangements etc.,				
а	20 mm nominal (OD) pipes	1.00	Each		
b	32 mm nominal (OD) pipes	1.00	Each		
С	40 mm nominal (OD) pipes	1.00	Each		
19	Providing, supplying & laying of Gunmetal type Non-Return Valve (NRV) - pressure rating not less than 16 Kg/Sqcm and IS778 with 2 Nos of MTA with jointing material like shellac, thread including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies VAT etc all complete as per as per specifications, complete complying with standard specification and as directed by the Departmental Officer.				
_	20 DIA	1.00	Each		
	25 DIA	1.00	Each		
С	32 DIA	1.00	Each		
	SUB TOTAL OF PLUMBING WORKS [C]				
D	ELECTRICAL WORKS				
_	MAIN SWITCH				
	Supply and erection of 125A TPN FSU with HRC fuses in sheet steel enclosure on wall mounting angle iron frame work and with suitable cable box at top and bottom for receiving 1 No.3½C 50 sqmm AYFY cable and 1 No. 4R of 25 sqmm unarmoured copper wires as required near the TNEB meter.	1.00	NOS		
2	LT PANEL BOARDS				
<u></u>	MAIN METER BOARD 3 PHASE	1.00	SET		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
	Supply, installation, testing and commissioning of cubicle floor mounting type, Main meter Board with copper bus-bars, bottom and top entry cable chambers for incoming & outgoing cables, dust and vermin proof, fabricated with 16 SWG CRCA sheets with powder coated. Bus-bars shall be electrolytic quality copper with pvc heat shrinkable colour coded sleeves and supported with SMC/DMC at adequate interval. The panel shall be provided with the following:-				
	ONO OFFICE A VOICE AND A VIEW AND				
	3NO OF125A I/C Fuse carries With Netural link including of Hylam Sheet,				
	1No of 3x125A fuse carrier, 1 No of Metering Provisions,				
	1 no 125A TPN FSU.				
	1 No of Netural Link and Dobule Side Panel Earthing,				
	10 sq,mm Wires for all Services. and O/G with suitable copper bus bar (33x6mm)				
	1 set of phase indicating lamp with protection fuses,				
3	MAIN LT PANEL BOARD	1.00	Set		
	Supply, installation, testing and commissioning of cubicle floor mounting type, Main LT Panel Board with copper bus-bars, bottom and top entry cable chambers for incoming & outgoing cables, dust and vermin proof, fabricated with 16 SWG CRCA sheets with powder coated. Bus-bars shall be electrolytic quality copper with pvc heat shrinkable colour coded sleeves and supported with SMC/DMC at adequate interval. The panel shall be provided with the following:-				
	INCOMER:				
	1 No 125A TP&N 35KA MCCB with rotary handle operating mechanism,				
	1 set of phase indicating lamp with protection fuses,				
	1 No 0-500V 96x96mm electronics voltmeter with selector switch, 1 No 0-150A 96x96mm electronics ammeter with selector switch				
	3 Nos 150/5A 10VA CL:1.0 CT for ammeter.				
	OUTGOING FEEDERS:				
	7 Nos. 63A TP&N 25KA MCCB with operating mechanism and 1 no of 100A				
	TP&N 25KA MCCB with operating mechanism				
	BUS BAR RATING: PH: 1R 32 x 6 mm Cu Flat				
	NL: 25 x 6 mm Cu Flat				
	E: 25 x 3 mm Cu Flat				
4	CHANGE-OVER SWITCH Supply and installation of 100A 4P on-load changeover switch in sheet steel enclosure on wall mounting angle iron frame work and including top & bottom cable boxes to receive incoming & outgoing cables.	1.00	NOS		
	DISTRIBUTION BOARD				
а	PDB - 1 & 2 Supply, Installation, testing and commissioning of 4 way TPN Phase Distribution board				
	(Double door type) with the following:- 1No. 63A TPN RCBOs as Incomer and Outgoings:- and 12 Nos 25/20/16A SP MCBs with necessary insulated copper bus bars, Neutral Links, earth Links and interconnections with suitable PVC insulated copper conductor wires & etc.	2.00	NOS		
b	LDB - 1 & 2				
J	Supply, Installation, testing and commissioning of 6 way TPN Phase Distribution board (Double door type) with the following:- 1No. 40A 4P RCBOs as Incomer and Outgoings:- 18 Nos 10/6A SP MCBs with necessary insulated copper bus bars, Neutral Links, earth Links and interconnections with suitable PVC insulated copper conductor wires & etc.	2.00	NOS		
		-			
6	EXTERNAL DB				
	Supply, Installation, testing and commissioning of 4 way TPN Phase Distribution board (Double door type) with the following:- 1No. 40A 4P RCBOs as Incomer and Outgoings:- 12 Nos 10/6A SP MCBs with necessary insulated copper bus bars, Neutral Links, earth Links and interconnections with suitable PVC insulated copper conductor wires & etc.	1.00	NOs		
7	VEDTICAL DR EOD LIET SHAET				
-	VERTICAL DB FOR LIFT SHAFT Supply, Installation, testing and commissioning of 4 way VDB TPN Distribution board				
	with the following:- 1No -63A 4P MCB as Incomer and Outgoings:- 4 Nos of 10/16A SP MCBs with necessary insulated copper bus bars, Neutral Links, earth Links and interconnections with suitable PVC insulated copper conductor wires.	1.00	NOS		
8	OUT GOING UPS MAIN DB				

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
	Supply, Installation, testing and commissioning of 4 way VDB TPN Distribution board with the following:- 1No -63A 4P MCCB as Incomer and Outgoings:- 3 Nos of 40A TP MCB & 1 No of 63A TP MCBs with necessary insulated copper bus bars, Neutral Links, earth Links and interconnections with suitable PVC insulated copper conductor wires.	1.00	NOS		
	WIIGS.	1.00	1103		
	UPS DB-1 & 2 Supply, Installation, testing and commissioning of 12 way SPN Distribution board with the following:- 1No -32A DP MCB as Incomer and Outgoings:- 10 Nos 10/6A SP MCBs with necessary insulated copper bus bars, Neutral Links, earth Links and interconnections with suitable PVC insulated copper conductor wires.	2.00	NOS		
10	LT CABLES				
	Supply& laying of 4 runs of 25 sqmm, 1.1KV grade PVC insulated, single core, multistranded copper conductor cable in suitable PVC rigid/ flexible pvc conduit from TNEB Meter to Main Switch with end termination using crimping type copper sockets.	10.00	Mtres		
b	Supply& laying of 4 runs of 6sqmm, & 2 runs of 2.5 sq.mm 1.1KV grade PVC insulated, single core, multistranded copper conductor cable in suitable PVC rigid/ flexible pvc conduit from Main Panel board to floor LDB with end termination using crimping type copper sockets.	75.00	Mtres		
С	Supply& laying of 4 runs of 10 sqmm, & 2 runs of 4 sq.mm 1.1KV grade PVC insulated, single core, multistranded copper conductor cable in suitable PVC rigid/ flexible pvc conduit from Main Panel board to floor PDB with end termination using crimping type copper sockets.	80.00	Mtres		
d	Supply& Laying of the following sizes of 1.1KV grade, PVC insulated, steel armoured and overall PVC sheathed LTUG cable with necessary clamping on wall.				
	4 C 50 sqmm Aluminium cable	20	Mtres		
	4 C 25 sqmm Aluminium cable	50	Mtres		
	4 C 6 sqmm_copper cable	30	Mtres		
iv	3 C 2.5 sqmm copper cable	200	Mtres		
11	Providing end termination for the following LTUG cable using suitable single compression type gland and crimping type aluminium sockets. 4C 50 sqmm Aluminium cable	4	Noo		
	4 C 25 sqmm Aluminium cable	4 QRO	Nos Nos		
	4 C 6 sgmm_copper cable	2	Nos		
d	3 C 2.5 sqmm copper cable	16	Nos		
12	POWER WIRING:				
а	Wiring for 20A/ 16A socket outlet using 2R 4.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm PVC conduit to be laid in floor, partitions etc complete with all accessories.	210.00	Mtres		
b	Wiring for 6A socket outlet (single circuit for each) for kitchen equipments sockets & water cooler using 2R 2.5 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS with all properties.	670.00	Marion		
С	floor, partitions etc complete with all accessories. Supply and fixing 20A - 3 pin metal clad socket with plug controlled by a 20A DP MCB (for Ac wall mounted stabilizers to be mounted in room) housed in manufacturers MS	670.00	Mtres		
d	powder coated box to be concealed in wall. Supply and fixing 20A - 3 pin metal clad socket with plug controlled by a 20A SP MCB (near AC indoor unit) housed in manufacturers MS powder coated box to be	3.00	Nos		
е	concealed in wall. Supply and installation modular type 16A 5-pin socket with 16A one way switch housed in MS box to be fixed in partitions or concealed in wall. The box shall be	3.00	Nos		
13	painted with 2 coats of enamel paint over a coat of red oxide primer UPS WIRING:	17.00	Set		
	Supply, installation, testing and commissioning of 60A rated auto phase shifter with				
a b	single line output for UPS unit.(SLHD 60 of Swift make) Supply, installation, testing and commissioning of 63A DP auto changeover switch in suitable sheet steel enclosure.	1.00	Nos Nos		
С	Supply & Laying of 4 runs of 10.0 Sqmm and 2 runs of 4.0 sqmm, PVC insulated, single core, multistranded copper conductor cable in suitable rigid PVC conduit from UPS MAIN DB to automatic power shifter of UPS unit.	10.00	Mtres		
d	Supply & Laying of 2 runs of 10.0 Sqmm and 1 run of 4.0 sqmm, PVC insulated, single core, multistranded copper conductor cable in suitable rigid PVC conduit from				
е	automatic power shifter of UPS unit. Supply & Laying of 2 runs of 6.0 Sqmm and single run of 2.5 sqmm, PVC insulated, single core, multistranded copper conductor cable in suitable rigid PVC conduit from	10.00	Mtres		
	UPS output to UPS DB contol switch and to UPS DB.	20.00	Mtres		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
f	Wiring for UPS socket outlet using 3R 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 20mm PVC conduit to be laid in floor, partitions etc complete with all accessories. (looping 3 sets of 3x6A socket outlet in one circuit).				
g	Supply and installation of 1 nos of multi pin 6A modular shuttered sockets controlled by 1 nos 6A modular type switches housed in MS box to be fixed in partitions or		Mtres		
	concealed on wall. Supply and installation of 3 nos of multi pin 6A modular shuttered sockets controlled by 2 nos 6A modular type switches housed in MS box to be fixed in partitions or		Nos		
	concealed on wall (for other work stations). Supply and installation of modular type 15A master switches housed in MS box to be fixed in partitions or concealed in wall. The box shall be painted with 2 coats of enamel	30.00	Nos		
	paint over a coat of red oxide primer. Supply and installation modular type 16A 5-pin socket with 16A one way switch	30.00	set		
j	housed in MS box to be fixed in partitions or concealed in wall. The box shall be painted with 2 coats of enamel paint over a coat of red oxide primer	3.00	Set		
14	LIGHTING WIRING:				
2	Wiring for light/fan and 6A plug points with 3 R 1.5 Sqmm PVC insulated, multistrand single core copper conductor FRLS wire in 20 mm PVC conduits, to be clamped on wall, ceiling, chase cutting on wall to conceal a portion of the same, to route through wooden partitions etc.				
b	1 light controlled by one switch	100	No		
С	1 light controlled by two switches (two way point)	10	No		
d	2 light controlled by one switch	4	No		
е	ceiling fan point with step type electronic regulator and anchor hook for mounting fan. ceiling fan point with step type electronic regulator and anchor hook for mounting fan	36	No		
f	controlled by two way switch - 2nos	4	No		
	Same as above, but for Wall mounted Fan / exhaust fan excluding regulator	17	No		
	Wiring for independent 6A multi pin socket along with 6A modular type switches housed in painted MS box (upto 3 independent plug points can be taken in one circuit).		No		
i	Same as above 5A Point in the switchboard itself.	32	No		
15.0	Supplying and laying lighting circuit mains partly in surface conduits and necessarily concealed in recessed conduits in wall/ partition/vertical drops etc and also in areas where no false ceiling is provided execept in safe room and locker room with 2 runs of 2.5 Sq.mm plus 1 run of 2.5 sqmm PVC insulated Flame Retardant Low smoke Cable (FRLS) with copper conductor in 20/25 mm dia. pvc conduit pipe including all accessories like base clamp, bends, couplings, junction boxes, rubber bushes etc. Circuit wiring measured from the DB to the first switch control box only. Looping circuit shall be part of the point wiring which will not be measured for payment.				
16.0	Extension of the exising wiring with 3 runs of 1.5sqmm PVC insulated copper conductor wire laid in metal flexible hose.	300 QRO	Mt Mt		
17	Fixing Trust SuppliedFans & Lights	QILO	IVIL		
а	Fixing Trust supplied Ceiling fan with necessary connecting wire	30	No		
b	Fixing of Trust supplied Exhaust fan with necessary connecting wire.	2	No		
С	Fixing of Trust supplied Tube light fitting with necessary connecting wire.	60	No		
d	Fixing of Trust supplied external wall mounted light fitting with necessary connecting wire.	6	No		
	Supply and fixing of 30 watt LED external light fitting with 19mmdia GI pipe (class B) with 1 no of 19mm dia GI bend fixed on external wall with clamps, bolt nuts with PVC unsheathed cu leads with clamp and aluminium painting with led lamp.		No		
18	EARTHING				
а	Supply, installation, testing and commissioning of Gi pipe earthing station using 2.5 M long 40mm dia 'B' class GI pipe with funnel, excavation & refilling with salt, charcoal mixture. A brick masonry trough of size 450x450x450mm depth and wall thickness not less than 150mm shall be provided with present PCC except slab.		No		
d	less than 150mm shall be provided with precast RCC cover slab. Supply and laying of 8 SWG bare Copper wire for earthing.	5 50	No Mtr		
ŭ .	SUB TOTAL OF ELECTRICAL WORKS (D)	30	IVIU		
Е	INTERNAL ROADS & PATHWAYS				
	Preparation and consolidation of sub grade with power road roller of 8to 12 tonne capacity after excavating earth to an average of 22 5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and rerolling the sub grade and disposal of surplus earth lead upto 50 metres.		SMT		
	Providing, spreading and compacting stone aggregate of assorted sizes ranging from 40 mm to 90 mm including spreading in uniform thickness, hand picking, rolling with 3 wheeled road/ vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materiak to fill up interstices of coarse aggregate watering and compacting to the required density.		СМТ		

SI No	DESCRIPTION OF ITEM OF WORK	QTY	UNIT	RATE IN FIGURES	AMOUNT (INR)
3	KERB LINING USING PRE-CAST RCC READY MADE SOLID BLOCKS: Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete, having atleast 18 inches length 12 inches height with lower portion thickness of 6 inches and top portion thickness of 4 inches, fixed in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand) including making joints with or without grooves (thickness of joints except at sharp curve shall not to be more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).		RMT		
4	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 coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.		SMT		
5	Providing and fixing Designer concrete external paver Tiles of 1" thickness with approved design, size/shape, colour and of ULTRA/ DURACRETE or equivalent make on prepared floor surface using Cement mortar 1:4 proportion and cement slurry, joints finishing, curing etc for specified areas near entracne porch all complete.		SMT		
	Providing and laying of 110mm dia 4.5 kg/cm2 pressure PVC pipe below the Road, from building to compound etc to route any services, cable etc as per direction of engineer incharge.		RMT		
	SUB TOTAL OF INTERNAL ROADS & PATHWAYS (E)				
	SUMMARY				
Α	MAIN BUILDING WORKS				
В	COMPOUND WALL WORKS				
С	PLUMBING AND SANITARY WORKS				
D	ELECTRICAL WORKS				
Е	INTERNAL ROADS & PATHWAYS				
	SUB TOTAL OF ALL SUB HEADS BEFORE GST				
	ADD GST 18%				
	GRAND TOTAL INCLUDING GST	<u> </u>			