

FINANCIAL BID: BILL OF QUANTITIES

PROJECT : PROPOSED CONSTRUCTION OF CANARA BANK'S RURAL SELF EMPLOYMENT TRAINING INSTITUTE AT CALICUT, KERALA.							
CONSTRUCTION SITE LOCATION: Resurvey No 2/1, Ambayathodu, Kattipara Grama Panchayath, Raroth Village, Thamarassery Taluk, Kozhikode (Calicut) Dt, Kerala State”.							
NOTE :: Visit to the Construction site by the prospective 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 workble rate for each & every item. The rates and amounts for each item shall be written in both figures and words in the respective columns.							
SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
A	CIVIL BOQ						
	Preparatory Works						
1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	2023.00	sq.m				
	Earth work						
2	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.	534.00	cu.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
3	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.,	0.00	cu.m				
4	PRE-CONSTRUCTION ANTITERMITE TREATMENT: Providing Pre-constructional anti- termite treatment and creating a chemical barrier to the building. The Minimum 10 years guarantee for all anti termite treatment works to cover this guarantee 5% of the bill amount will be held till guarantee period.						
	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.	474.00	sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
5	PILE FOUNDATION :: Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) :						
i	400mm dia piles	Quote rate only	RM				
ii	450mm dia piles	Quote rate only	RM				
5a	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge/Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge. Single pile above 50 tonne and upto 100 tonne Safe capacity. Initial test. (Test load 2.5 times the safe capacity)	Quote rate only	FULL TEST LOT				
6	Supplying and filling in foundations with M sand in layers not exceeding 15 cm.thick,well watered, rammed and consolidated etc, complete. (ONLY FOR FOOTINGS BED AREA).	30.00	cu.m				
7	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.	115.00	cu.m				
8	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.	400.00	cu.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
9	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.	Footing, plinth beam, etc.	760.00	sq.m				
b.	Plain surfaces such as roof slab, floor slab, beams , lintels , loft, sill slab, staircase waist , portico slab and other similar works.	2215.00	sq.m				
c.	Square, rectangular and round columns and small quantities such as sunshades, parapet cum drops, window boxing ,fin projections and other similar works.	595.00	sq.m				
10	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.						
a	Foundation and basement	130.00	cu.m				
b	Ground floor	200.00	cu.m				
c	First Floor	125.00	cu.m				
d	Terrace floor	10.00	cu.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
	Steel - Fe 500						
11	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.	52000.00	Kg				
12	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 <i>having minimum of 35kg/cm2 compressive strength and of size 9" x 4 1/2 " x 3"</i> including curing, scaffolding ,materials, labours, tools & plant etc. complete.						
a	Foundation basement	67.00	cu.m				
b	Ground floor	164.00	cu.m				
c	First Floor	116.00	cu.m				
d	Terrace floor	15.00	cu.m				
13	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.						
a	Ground floor	84.00	Sq.m				
b	First Floor	229.00	Sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
14	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	1200.00	sq.m				
15	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).	1770.00	sq.m				
16	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).	1500.00	sq.m				
17	CEMENT CONCRETE FLOORING (for works shed areas) 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).	56.00	sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
18	Providing & laying full body vitrified tiles flooring of Naveen/ Johnson/ Kajaria/ RAK/Somany makes and of approved shades (colour and shade as selected by Architect/ Trust) and of minimum size 1200 mm x 600mm (4 ft x 2 ft) with 10mm thickness 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 matching colour, curing etc. complete(Basic rate -600/sq.mtrs). The item shall include applying POP after laying and clearing off the same after completion of all works and cleaning thoroughly all stains with acid wash. Skirting also will be measured on area basis only.	905.00	sq.m				
19	Supplying, laying and fixing in position Anti-skid ceramic tiles of size minimum 1 ft x 1 ft or of bigger size, 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 flush with tile surface etc. complete. (Basic rate-400/sq.mtrs)	95.00	sq.m				
20	Dadoing 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-400/sq.mtrs).	400.00	sq.m				
21	Supply and fixing of polished granite slab 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, counter Wash Basin platform, Urinals dividers, cupboard / locker storage shelves in dormitories) (Granite basic rate-1100/sq.mtrs). The item shall include full rounding of the exposed sides/edges and corners.	8.00	Sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
22	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, 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). The item shall include full rounding of the exposed sides/edges and corners.						
a)	With Tandoor Blue slabs of 600 mm x 600 mm	8.00	Sq.m				
b)	With Kota stone slabs of 600 mm x 600 mm	5.00	Sq.m				
23	Providing, fabricating and fixing M.S. grills for Windows and ventilators as per tender drawing., made out of 12 mm square M.S bars spaced at 200mm center to center in one direction and 100 mm center to center in another direction with alround frame & intermediate supports at every 1.00 meter, made out of MS flat of 32mm x8 mm thickness etc. including necessary welding, grinding, fixing to the masonary wall using Cement concrete and cement mortar 1:4 proportion complete as per drawings and specifications and as directed by the Engineer.	125.00	Sq.m				
24	SS Hand Rail : Providing and fixing Stainless steel (SS) pipe handrail having 900 mm hieght (as shown in the TENDER drawing) made out of 50 mm outer dia for top rail (with 1.6mm wall thickness) and 40.00mm (1.6mm wall thickness) SS pipes placed vertically at a spacing not exceeding 900 mm (as per drawing) and three horizontal SS pipes of 20 mm diameter (with 1.2mm wall thickness) spaced at equi-distant. The railings shall be fixed to the staircase treads / landing surface with necessary drilling, grouting and 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, griding and polishing bends, joints, ends to have smooth surface etc., as per tender drawing and as directed by Engineer in-charge. Rate is per running metre length of railings provided.	25.00	Rmt				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
25	Manufacturing, supplying and fixing of Stainless steel hand rails for PCP Toilet using 50mm dia 304L grade SS pipe of 1.6mm thick will be provided with tubular supports made of 304L grade SS pipe of 25mm dia of 1.6mm thick welded to the railing. The supports will be grouted into the wall and provided with 93mm thick ss circular base plate of 304L grade. The rate shall included for grouting into concrete with necessary supporting arrangements the hand rail in floor polishing buffing, cutting, grinding, conveyance, welding charges, electrical charges, etc. complete.	6.00	R.mt				
26	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 complying 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.						
a	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	70.00	sq.mt				
b	Three track sliding windows (for Office, Dormitories, faculty 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 shuttters shall be provided.	50.00	sq.mt				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
c	Supplying and fixing in position of alulminium anodised colour matt finish Louvered Ventilators . The outer frame will be 24x38x3mm @ 0.546 Kg / m, Centre mullion: 59x33x2.50mm @ 0.99kg/m. Aluminimu clip 17.27x17.15x1.40mm @0.175 kg/m with necessary 4mm thick Al. Clips pans for louvers , including all materials, labour & power consumption charges required for fabrication if necessary chipping dismantling making holesing RCC columns,beamsor masonry wherever necessary with power drill to the extent required and make good to the original conditions after fixing etc., complete. The Aluminium sirface is to be anodised with Aluminium sirface is to be anodised with matt finish under electrically controlled condition in accordance with ISI specification 1868/1962 of anodic film thickness of not less than15 microns (fifteen) for all sections. All the materials should be got approved by the Engineer-in-charge before fixing in position	7.00	sq.mt				
27	PVC DOOR & PVC Framed Shutter (for toilet/ bath rooms)						
a	Providing and fixing factory made PVC door frame made of PVC extruded sections having an overall dimension of 48mm x 40 mm (tolerance ± 1 mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-charge.						

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
b	the PVC shutters shall be made of 24 mm thick factory made styles and rails of a PVC hollow section of size 59 mm x 24 mm and wall thickness 2 mm (± 0.2 mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75mm x 220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20mm x 20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a PVC hollow section of size 100mm x24 mm and 2 mm (± 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a PVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter). Read items (a) & (b) together while quoting rate) i.e rate per sft includes frame and shutter together.	41.00	sq.m				
28	DOUBLE LEAF GLASS MAIN ENTRANCE DOOR Providing and fixing Glazed door using 12mm thk Plain glass with border design & emblem etc using frosted film. The plain glass with design made in frosted film shall be fixed using Well seasoned beach wood sections of size 1 1/4" x 5" at top and the Bottom rail of size 1 1/2" x 10".The rails to be made out of best quality beach wood. Ech door shutter shall have 18" long Stainless steel handle and fixed to the floor using 2 nos double action floor spring of Ozone make. The design in glass pattern to be followed strictly as per instructions of the Architect andas per the detailed working drawings. Size of the door is around 7 ft x 7 ft and actual size may vary as per site conditions. The vertical exposed edges of the glassshutters to be machine polished. Fixing will be using dorma/Equivalent patch fitting and locking arrangement is to be used for fixing the glass.	8.00	sq.m				

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29	SLIDING DOOR :Providing & fixing sliding door using aluminium powder coated door frame and shutter sections with matt finish, party glazed with 6 mm plaing galss and partly panelled using 12 mm thick both side prelaminated particle board, fixed with fixed & sliding aluminium channels and fittings like 2 door handles, one concealed 4 lever lock, door stopper, 2 nos- 6"long PC Aluminium tower bolts etc. all complete.	Quote rate Only	sq.m				
30	DOUBLE SHUTTERED WOODEN DOORS: Supplying and fixing Double Leaf Flush Doors using alround door frame made of well seasoned Honne or Padaku or Vengai species or Deodhar or Red Meranti species or equivalent hard wood of 125x100mm size with machine planing and offset for shutter positionind and shutter shall be made of 30 mm thick factory made water proof grade flush shutter of GREENPLY/KITPLY/CENTURY/UNIPLY makes finished with both side 1.0 mm thk laminate of Formica/Greenlam make and of approved shade, colour. The shutters alround edges shall be lipped with approved first cls quality teak wood lipping. Each door frame shall be fixed in position using 6 Nos.of iron hold fast using C.C.1:2:4 proportion.						
	Each door shutter shall be fixed door frame using 4 Nos.of S.Steel butt hinges 125mm long including wind appliances furniture iron fittings, There shall be 2Nos.of s s aldrop of 250mm length, 4 Nos of SS tower bolts of 150mm length, 4 nos 150 mm SS handles, 2 nos S S door stoppers and fixed in position as directed during execution.(ISI STD).etc., complete.	3.00	sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
31	<p><u>SINGLE SHUTTERED WOODEN DOORS:</u> The around door frame shall be made of <u>well seasoned hard wood like Honne or Padaku or Vengai or Deodhar or Red Meranti species</u> or equivalent having finished size of 125mm x 60 mm size with machine planing and offset for shutter positioning. The shutter shall be of ISI marked single Leaf 30 mm thick factory made water proof grade flush shutter confirming to IS-2202 (part-I) decorative type, core of block board construction with frame made of First class hard wood and well matched hard wood 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutter. The shutters shall be finished with both side 0.8 mm thick laminate of Formica/Greenlam make and of approved shade, colour. The shutters around edges shall be lipped with approved first class quality beech or teak wood lipping. The door frame shall be finished with 2 coats of enamel paint over a coat of wood primer and this cost is inclusive in the item rate.</p>						
	<p>Each door frame shall be fixed in position using 6 Nos.of P.C. MS iron hold fast using C.C.1:2:4 proportion. Each door shutter shall have 1 no 10" long powder coated (PC) aluminium make Aldrop, 2 nos - 6" long PC aluminium handles, 1 nos 6" long PC aluminium tower bolts at centre level all approved makes, 4 nos MS Iron powder coated cut hinges of 6" length, 1 no floor mounted PC aluminium door stopper etc. complete as per detailed drawing.</p>	42.00	sq.m				
32	<p><u>STEEL DOOR</u> Manufacturing, supplying and fixing of Steel doors with following specification. MS angle of size 50x50x6mm at 3.9 kg/m shall be used for outer frame and MS Angle of size 35x35x5mm at 2.6 Kg/m for the shutter frame. Stiffeners with 32x6mm at 1.5 Kg/m MS Flat is provided as the lock rail of the door and welded intact on both ends to the shutter frame. 18 G CR Sheets of best quality is laid as panel in the shutter frames. 18x5mm at 0.70 kg/m MS flat is welded over the 32x6mm at 1.50kg/m MS Flat on the rear side of the door, sandwiching the CR Sheet for rigidity. Additional stiffeners with 18x5mm at 0.7 Kg/m MS flats are provided diagonally on the rear side of the shutter. Each door & shutter combine shall have 2 nos 10 inch long MS Aldrops- 2Nos, 4 nos 6" length MS hinges, 6 Nos of 250mm length hold fasts 200mm length specified at the ends are welded to the outer frame of the door. Tower bolt 2 Nos at the top & bottom provided.</p>	12.00	sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
33	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.	9.00	Cu.m				
	PAINTING WORKS						
34	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.	120.00	sq.m				
35	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.	9.00	sq.m				
36	Providing and applying Acrylic Emulsion paint finish of approved make & shade in two coats over a coat of approved wall primer and 2 coats of smooth putty using Birla putty to give an even smooth surface without any undulations & shade as per manufacturer's instruction to the internal ceiling plastered surfaces including preparation of surfaces, scaffolding, cleaning the paint drop stains after completion painting works etc.all complete as per specification at all heights.	2135.00	sq.m				
37	Providing and applying Acrylic Emulsion paint finish of approved make & shade in two coats over a coat of approved wall primer and 2 coats of smooth putty using Birla Putty to give an smooth even surface without any undulations & shade as per manufacturer's instruction to the internal wall plastered surfaces including preparation of surfaces, scaffolding, cleaning the paint drop stains after completion painting works etc.all complete as per specification at all heights.	1770.00	sq.m				

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38	Supplying and painting the exterior walls with one coat of wall primer and two coats of Acrylic Exterior emulsion (APEX quality of Asian paints or its equivalent) as per manufacturers specifications including preparation of surface, curing the primer coat and including Scaffolding, 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).	990.00	sq.m				
39	Weathering Proof Course (WPC): Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc as per the following specifications. This Water proofing work shall be guaranteed for minimum of five years period for water tightness.						
a	Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment.						
b	Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with 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 mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep.						

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
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.	600.00	sq.m				
40	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.	60.00	sq.m				
41	Providing water proof plastering on top of chajjas in cement mortar 1:4 (1 Cement:4 C.Sand) , 20 mm thick including providing and removing scaffolding , rounding of all corners wherever required smooth rendering etc. , complete mixing with water proof compound of approved make (Fosrock , Build plast chemicals) as per manufacturers specifications with a minimum of 150 ml per bag of cement used including curing etc., compete with all lead and lift charges for all heights.	153.00	sq.m				
42	Rolling Shutter Supply and fixing rolling shutters of approved make made of required size M.S laths,interlocked together through their entire length and jointed together at the end by end locks,mounted on a specifically designed pipe shafts with brackets, side guides and arrangements for inside and out side locking with push strength confirming to IS:4454 part 1 and MS top cover of required thickness for rolling shutters 80x1.2mm MS laths with 1.20mm thick top cover main entrance. including applying a priming coat of approved steel primer and Two Coat of Synthetic Enamel Paint.	10.00	sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
43	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.	5000.00	Litre				
44	UNDER GROUND SUMP TANK: Approximate Size 2.1x3.3x1.8 - 12500 liters capacity						
a	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 M25 RCC 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' x 2' 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 tank in litres	12500.00	litres				
45	UNDER GROUND SEPTIC TANK and SOAK PITS as per drawings - Approximate capacity 12500 lts 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 reinforcement all complete in all respect. The drawing of septic tank may please be referred. The item shall also include soak pits construction as per the tender drawing.	1.00	Set				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
46	COMPOUND WALL WITH PRECAST ITEMS as mentioned in (a) & (b) below						
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 concrete of M20 grade upto 6 inches height above the natural ground level , curing the concrete etc all complete.The exposed surfaces shall be painted with a coat of wall primer and 2 coats of exterior grade plastic emulsion paint of APEX quality of Asian Paints Make or its equivalent. Payment is per running meter of poles fixed with concreting including the embedded portion length.	110.00	RMT				
b	PRECAST CONCRETE SLABS 50 MM THICK :Providing and fixing in position 1950 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 carefully inserting into the grooves of the Precast concrete poles/ Posts including the cost of materials and labour charges etc, complete. The exposed surfaces shall be painted with a coat of wall primer and 2 coats of exterior grade plastic emulsion paint of APEX quality of Asian Paints Make or its equivalent. The rate is per square metre of the precast slabs provided and fixed, all complete.	300.00	sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
47	Providing & fixing Entrance M S gate of 20 ft long by 5 ft height strictly as per below specifications with necessary welding, rivetting in built up sections, trusses and framed work, including cutting, hoisting, fixing in position all complete, all as per the directions of Engineer In Charge. The gate shall be made into 4 foldable independent units but each 2 gates inter-connected with heavy duty hinges and should be in a position to swing/ open inside or outside area. In the closed position, the gates at the center shall have locking arrangement. Each gate shall have vertical tower bolt to be inserted into the ground level concrete. Each gate's around frame shall be made of 80mm x 40mm x 2.6mm thickness with Unit weight 4.55Kg/Meter. There shall be one intermediate horizontal & vertical members shall be spaced at 6 inches center to center for all gates. These shall be made of mild steel (MS) rectangular tubular section of 40mm x 25mm size with 2.00 mm thickness and Unit weight 1.83Kg/M. The gates shall be fixed to the RCC pillars using MS fabrication. The entire gates surfaces shall be finished with a coat of steel primer and 2 coats of enamel paint of approved colour and brand. The welding joints, gaps, if any shall be finished with metal paste before painting. The tender drawing provided is only for illustrative purpose & the above specifications prevail over the tender drawing.	12.00	sq.m				
	SUB TOTAL OF CIVIL WORKS (A)						
	B PLUMBING & SANITARY WORKS						
	PART-I : SANITARY FITTINGS						
48	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.	7.00	Each				
49	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.	11.00	Each				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
50	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.	17.00	Each				
51	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. (Director's toilet, Guest faculty room bath rooms only)	3.00	Each				
52	Supplying and fixing in position 15 mm dia Brass Chromium Plated Two way bib cock tap with health faucet gun and 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. (Taps should be got approved by the Engineer in-charge before use on the works). (Usage - in Dormitory water closets and general water closets	12.00	Each				
53	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.I. 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.	4.00	Each				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
54	Supplying and fixing Parryware/ Jaguar make good quality brass CP soap tray of size 150 x 100mmx50mm depth including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications. (The soap tray should be got approved by Executive Engineer before use on works).	12.00	Each				
55	Supplying and fixing Chromium plated towel rail of approved make & brand 600 mm long and 20mm dia with chromium plated embeded / concealed brackets including cost of teak wood plug and CP Screws etc., Complete complying with standard specification and as directed by the Departmental officers.	12.00	Each				
56	Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of moulded / precast Quartz sink with single bowl with drain board supported over the granite slab cut to size and with additional MS framed brackets. The item shall include suitable 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., including cutting and making good the wall/floors wherever required.	1.00	Each				
57	Suppling and fixing in position 15mm.diameter brass / C.P screw down tap / pillar tap / bib cock (heavy duty) of Parryware / Hindware / CERA 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)						
a	C.P. Long body Bib cock	18.00	Nos				
b	Swan Neck tap (at Kitchen Sink)	2.00	Nos				
c	Pillar cock	17.00	Nos				
	PART - II SOIL, WASTE AND VENT PIPE LINES						
58	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.						

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
a	40mm dia. 6kg class PVC pipes.	34.00	Rmt				
b	50mm dia. 6kg class PVC pipes.	22.00	Rmt				
c	75mm dia. 6kg class PVC pipes.	75.00	Rmt				
d	110mm dia. 6kg class pipes.	30.00	Rmt				
59	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 masonry 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.	29.00	Each				
60	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.Scaffolding 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.						
a	75mm dia. 6kg class PVC pipes.	4.50	Rmt				
b	110mm dia. 6kg class pipes.	50.20	Rmt				
61	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.						
a	75mm dia. 6kg class PVC pipes.	4.00	Each				
b	110mm dia. 6kg class pipes.	8.00	Each				
62	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.						

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
a	75mm dia. 6kg class PVC pipes.	7.00	Each				
b	110mm dia. 6kg class pipes.	5.00	Each				
	PART-III - EXTERNAL DRAINAGE						
63	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.						
a	110mm dia. 6kg class pipes.	55.00	Rmt				
b	160mm dia. 6kg class III-pipes.	35.00	Rmt				
64	Supply, laying and erection 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				
65	Supplying and Erection and construction of sewer chambers of required internal dimensions 600 mm x 600mm upto 0.6 mtr depth with 230 mm brick masonry in C.M.1:5 thk of masonry over bed of 1:2:4 R.C.C. 200 mm thk above 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 600mm x 600mm (clear opening) complete complying with standard specifications etc.,	8.00	Each				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
66	Construction of rain water recharge well of 1200mm dia and depth upto 1500mm, in addition 110 dia special blue slotted pipe for bore well.pipe should be laid from bottom of ring well centre to below 1500mm as shown in the drawings, including all types of excavation,occur for pipe, filling of rain water harvesting materials with construction of R.C.C. ring and top 100mm RCC SLAB WITH 450X450mm perforated SFRC manhole and 230mm brick wall in 2'height with below 300mm lengthx100mm thk P.C.C. as per the structural filling the filter media as per drawing.	Quote rate only	Each				
	PART-IV-WATER SUPPLY SYSTEM						
	INTERNAL CONCEALED WORKS						
67	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 Scaffolding & 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.						
a	25 mm nominal (OD) pipes	103.23	Mtrs				
68	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 Scaffolding & 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.						
a	20mm nominal(OD) pipes	0.00	M				
b	25mm nominal(OD) pipes	22.00	Mtrs				
c	32mm nominal(OD) pipes	18.00	Mtrs				
d	40mm nominal(OD) pipes	68.00	Mtrs				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
e	50mm nominal(OD) pipes	0.00	Mtrs				
PART -V- EXTERNAL PLUMBING WORKS							
69	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 Scaffolding & 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.						
a	25 mm nominal (OD) pipes	18.20	Mtrs				
b	32 mm nominal (OD) pipes	38.00	Mtrs				
c	100 mm nominal (OD) pipes	16.00	Mtrs				
70	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.,						
a	20 mm nominal (OD) pipes	2.00	Each				
b	32 mm nominal (OD) pipes	2.00	Each				
c	40 mm nominal (OD) pipes	2.00	Each				
71	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, GST etc all complete as per as per specifications, complete complying with standard specification and as directed by the Departmental Officer.						
a	20 DIA	1.00	Each				
b	25 DIA	1.00	Each				
c	32 DIA	1.00	Each				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
72	SINGLE PHASE SUBMERSIBLE PUMP: Supply, Erection testing and commissioning of CRI or Kirloskar or or Equivalent ISI make Single phase Submersible type water pumps 1 HP - 30 Mtrs head with required electrical starter switch set kit with control valves and float switches for water pumping from sump tank to OHT Tank [For Raw water]	1.00	Each				
	SUB TOTAL OF PLUMBING WORKS (B)						
C	ELECTRICAL WORKS						
73	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	No				
74	LT PANEL BOARDS						
	MAIN METER BOARD 3 PHASE						
	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:- 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 Nos 150/5A 10VA CL:1.0 CT for ammeter.	1.00	Set				
75	MAIN LT PANEL BOARD						

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
	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 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	1.00	Set				
76	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	No				
77	DISTRIBUTION BOARD						
a	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	No				
b	LDB - 1 & 2						
	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	No				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
78	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	No				
79	OUT GOING UPS MAIN DB 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	No				
80	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	No				
81	LT CABLES						
a	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	Mt				
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.	Quote Rate only	Mt				
c	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.	50.00	Mt				
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.						

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
i	4 C 50 sqmm Aluminium cable	50.00	Mt				
ii	3 C 2.5 sqmm copper cable	300.00	Mt				
82	Providing end termination for the following LTUG cable using suitable single compression type gland and crimping type aluminium sockets.						
a	4C 50 sqmm Aluminium cable	4.00	No				
b	3 C 2.5 sqmm copper cable	16.00	No				
83	POWER WIRING:						
a	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.	600.00	Mt				
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 wire in 25mm PVC conduit to be laid in floor, partitions etc complete with all accessories.	250.00	Mt				
c	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 powder coated box to be concealed in wall.	8.00	No				
d	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 concealed in wall.	8.00	No				
e	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 painted with 2 coats of enamel paint over a coat of red oxide primer	20.00	Set				
84	UPS WIRING:						
a	Supply, installation, testing and commissioning of 60A rated auto phase shifter with single line output for UPS unit.(SLHD 60 of Swift make)	1.00	No				
b	Supply, installation, testing and commissioning of 63A DP auto changeover switch in suitable sheet steel enclosure.	1.00	No				
c	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	Mt				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
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 automatic power shifter of UPS unit.	10.00	Mt				
e	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 UPS output to UPS DB control switch and to UPS DB.	30.00	Mt				
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).	250.00	Mt				
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 concealed on wall.	30.00	No				
h	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 concealed on wall (for other work stations).	30.00	No				
i	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 paint over a coat of red oxide primer.	3.00	Set				
j	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 painted with 2 coats of enamel paint over a coat of red oxide primer	20.00	Set				
85	LIGHTING POINT WIRING:						
a	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	62.00	No				
c	1 light controlled by two switches (two way point)	6.00	No				
d	2 light controlled by one switch	27.00	No				
e	ceiling fan point with step type electronic regulator and anchor hook for mounting fan.	45.00	No				
f	ceiling fan point with step type electronic regulator and anchor hook for mounting fan controlled by two way switch - 2nos	2.00	No				
g	Same as above, but for Wall mounted Fan / exhaust fan excluding regulator	17.00	No				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
h	Wiring for independant 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).	10.00	No				
i	Same as above 5A Point in the switchboard itself.	42.00	No				
j	Wiring for call-bell point including buzzer	1.00	No				
k	Computer power point - UPS power stations: Supplying all materials and fixing modular type 3numbers 6A, 3 Pin sockets controlled by one number 16A SP control indicator switch with moulded front plate, housed in a suitable factory built MS/PVC box	36.00	NO				
1	SITC of all materials and wiring for circuit mains from UPS Sub DB to work station using 2 runs of 2.5 sq mm 1100V, FRLSH PVC insulated stranded Copper conductor including earthing with 1 run of 2.5 sq.mm green copper wire continuous run thorough 25 mm PVC conduit as per IS, giving inter connection etc complete as required and as directed by engineer in charge. etc complete as required . Rate shall be for the average length from DB to the primary switch board and looping to adjacent switch boards. No claim for additional wire and conduit. (Maximum 2 points from 1 Circuit)	18.00	NO				
86	Wiring for Name Board lighting circuit using 3R 4.0 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 20mm PVC conduit to be on wall complete with all accessories.	10.00	Mt				
87	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 except 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.	300.00	Mt				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
88	Lift Shaft Wiring : Wiring, Connecting, Testing & Commissioning for lift well light point and 6Amps power socket outlet for all 2 floors with 2 x 1.5 sqmm FRLS PVC insulated stranded copper conductor of 1100V grade along with 1 x 1.5 sqmm FRLS PVC insulated stranded copper conductor cable as earth wire in MS conduit including providing and fixing switch box, 2 Nos. of 5A single way flush type switch (for controlling light point and socket Outlet) for each floor of the lift well , 1 No. 5A 5 Pin shuttered socket outlet with flush type switch for each floor of the lift well and making necessary connections complete etc	quote rate only	PTS				
89	SUPPLY AND FIXING OF LIGHT FITTINGS AND FANS:						
a	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.	6.00	No				
b	Supply and Fixing of WT bulk Head Fitting with Guard (Philips/ Bajaj/Crompton/ K-lite) Suitable For 11W LED Lamp.	8.00	No				
c	Supply and erection of 65mm dia GI pipe (Class B)of 4 mtr Length with 300mmX300mmX 6mm MS base plate Duly Welded at the bottom and with Concreting and construction on Masonary pedestal with Ms box of 30cm x 20cm x 10cm with angle iron frame work with lock and key arrangements and with supply and fixing post top lantern fitting and necessary accessories with complete set. suitable for mounting and Supply and Fixing 1 no of 25W LED street light fitting,including The pole should be provided 6A SPMCB housed in DP Box,4 way 16A terminal block,SMC box for loop in and loop out cable arrangements,SMC box for loop in and loop out cable entry and exit in GI pipe of 2.5" dia fitted in pole with clamps.	8.00	No				
d	Supplying and Fixing of 230mm dia light duty exhaust fan with auto gravity louvre	3.00	No				
e	Supplying and Fixing of 48" sweep ceiling Fan of Crompton greaves / Usha / Bajaj make fans including patch wiring, extension rod, if any all complete	60.00	No				
f	Supplying and Fixing of 18" dia wall mounted Fan	5.00	No				
90	Telephone / LAN cabling :Supply and laying of 25mm dia PVC conduit through Concealed ceilling floor, wall and partitions etc including all necessary materials from EPABX to varoius telephone sockets.	350.00	Mt				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
91	EARTHING						
a	Supply, installation, testing and commissioning of copper plate earthing station using 600x600x3mm copper plate, 2.5 M long 40mm dia 'B' class GI pipe with funnel, excavation & refilling with salt , charcoal mixture , connecting 2 runs of 25x3mm copper strip with plate and extending up to the G.L for taking up the connections as per IS-3043 for earthing of UPS-1& 2. A brick masonry trough of size 450x450x450mm depth and wall thickness not less than 150mm shall be provided with RCC cover.	1.00	No				
b	Supply, installation, testing and commissioning of Earth Electrode using 2.5M long perforated 'B' class GI pipe with funnel buried in ground filled with salt charcoal mixture, construction of masonry trough of size 450x450x450mm depth and wall thickness not less than 150mm shall be provided with RCC cover. (including generator earthing)	2.00	No				
c	Supply and laying of 8SWG bare Copper wire for earthing.	30.00	Mtr				
	SUB TOTAL OF ELECTRICAL WORKS (C)						
D	INTERNAL ROADS & PATHWAYS						
92	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.	240.00	SMT				
93	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.	22.00	CMT				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
94	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 thicknees 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).	100.00	R.mt				
95	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.	480.00	Sq.m				
96	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.	30.00	Sq.m				
97	Providing and making rain water open type trench/drain having 2 ft bottom width, 3 ft top width, 2 ft average clear depth by necessary excavation and spreading the earth at the low lying area within the plot and providing 3" thick hammer dressed unpolished grey granite slabs for bottom and sides lining. The side slabs joints shall be finished with cement mortar 1:4 proportion. The payment is per running metre of the drain created.	15.00	R.mt				
98	Providing and Fixing 50mm minimum thickness Perforated RCC precast cover slabs of required width and length on drains as per approved sample and directions of Engineer incharge.	18.00	Sq.m				

SL NO.	DESCRIPTION OF ITEMS OF WORKS	QTY	UNIT	RATE IN FIGURES	RATE IN WORDS	AMOUNT IN FIGURES	AMOUNT IN WORDS
99	Providing and laying of 250mm dia RCC hume pipe below the Road, from building to compound etc to route any services, cable etc as per direction of engineer incharge.	10.00	R.mt				
		0.00					
100	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.	0.00	R.mt				
	SUB TOTAL OF INTERNAL ROADS & PATHWAYS (D)						
	SUMMARY						
A	CIVIL WORKS						
B	PLUMBING AND SANITARY WORKS						
C	ELECTRICAL WORKS						
D	INTERNAL ROADS & PATHWAYS						
	TOTAL OF ALL SUB HEADS BEFORE GST						
	ADD GST AT 18 %						
	GRAND TOTAL INCLUDING GST						