

**TENDER
FOR**

**ADDITIONAL CIVIL & ELECTRICAL WORKS IN
THE NEW CONDOM MANUFACTURING FACILITY
OF HLL
AT RUBBER PARK, IRAPURAM, KOCHI**

**PART-III
PRICE BID**

**TENDER NO. HLL/ID / 13/79
OCTOBER 2013**



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1 COMMERCIAL CONDITIONS

1.0.1 The tendered rate shall inter alia be deemed to include for the provision of all materials, process, operation and special requirements detailed in the particular specification irrespective of whether these are mentioned in the description of equipment schedule and Bill of quantities or not. It is an express condition of the contract that the tendered rates for various items in the Bill of Quantities shall be deemed to include for the full, entire and final condition of the contractor respective items of the works in accordance with the provision of the contract.

1.0.2 The tendered rate shall include for all taxes, duties, etc. as applicable and shall be quoted on the works contract basis for **Additional Civil & electrical works in the New condom manufacturing facility of HLL at Rubber park, Irapuram, Kochi.**

1.0.3 The tendered rate shall remain firm and free from variation due to rise in the cost of materials/equipment, labour or any other reasons whatsoever during the contract period and valid extension on the case may be.

1.0.4 The quantum of excise duty included in the tendered price, the rate at which they were assumed etc. shall be indicated in the tender.

1.1 UNIT RATES

1.11 Only approved work will be measured on completion and priced as per rates quoted against the respective items.

1.2 BRIEF DESCRIPTION OF PRICING

1.2.1. Unforeseen difficulties for which provision has not been made in the tender will in no way relieve the successful tenderer from the full execution of the work.

1.2.2 The price quoted shall be the final amount for this finished work.

1.3 INCOME TAX

Any payment to the contractor as per contract, will be made after deducting income tax as per the rules and regulations.

1.4 SALES TAX AND EXCISE DUTY

The tenderer shall clearly indicate sales tax, Excise and other duties as applicable in his offer for carrying out this work.

1.6. SUBMISSION OF BILL

1.6.1. The contractor shall from time to time prepare and submit interim bills of the work executed and on completion of the contract, he shall prepare and submit the final bill. The measurements sheets in support of the interim and final bills shall be prepared by the contractor on the basis of measurements taken by him jointly with the project engineer and the said measurement sheets shall be submitted by him with the relevant bill.

1.7. EXTRA ITEMS

The contractor is bound to carry out any items of work necessary for the completion of the job even though such items may not have been included in the schedule of probable quantities or rates, such items being necessary or essential for completing the job. Variation order in respect of such additional items and their quantities will be issued in writing by the employer.

1.7.1 All shavings, cuttings and other rubbish as it accumulates from time to time during the progress of work and on completion including that of the sub-contractors and special tradesman and all materials condemned by the project engineer shall be cleared and removed from the site by the contractor without any extra charge.

1.7.2 All measuring steel taps, scaffolding, ladders instruments and tools that may be required for taking measurements shall be supplied by the contractor.

1.8. OVER TIME WORK

If the contractor is required to work night or on holidays in order to maintain the time schedule he shall take prior approval from the Engineer-in-charge. He should also

provide and maintain at his own cost sufficient lights as may be necessary to enable the work to proceed satisfactorily during the night.

- 1.8.1. The contractor shall give full facilities to all other contractors working on site. He shall also arrange his programme of work so as not hinder the progress of other trades. The decision of the Engineer-in-charge on any point of dispute between the various parties shall be final and binding.
- 1.8.2. It is specifically pointed out that the contractor shall not be entitled to any compensation whatsoever on account of delay in procurement or supply of controlled materials and the rates quoted in the contract are fixed till the completion of the contract.
- 1.8.3. The contractor shall co-operate with other agencies appointed by the owners for the work to proceed smoothly with the least possible delay and to the satisfaction of the owners, architects and the consultants.
- 1.8.4. The owners shall provide a source for power supply at one convenient point at site. The contractor shall at his own cost install a separate meter at the said source and lay additional cables from the said source also at his own cost. For the electricity consumed by the contractor he shall pay the owner the actual cost at the rate charged by the local authority for power for constructional purposes. The contractor shall also obtain the necessary permit for utilizing power for constructional purposes.

1 SPECIAL CONDITIONS

2.1. EXECUTION WORK

2.1.1. The whole of the work as described in the contract (including bills of materials, specification and all drawings pertaining thereto) and as advised by the Engineer-in-charge from time is to be carried out and completed in all parts to the entire satisfaction of the Employer. Any minor details of construction which are obviously and fairly intended, or which may not have been definitely referred to in this contract, but which are usual construction practice and essential to the work, shall be included in this contract.

2.2. CERTIFICATE OF COMPLETION

2.2.1 The contractor shall intimate to the Engineer-in-charge in writing as and when the works are completed and put into beneficial use in order to enable the consultants to check certify to the owners to take over the plants.

2.2.2 The work shall not be considered as completed and put into beneficial use until the consultants have certified in writing that the same has been completed and put into beneficial use.

2.2.3 The defects liability period of one year shall commence from date of such completion or any specific date mentioned therein.

2.3. OTHER CONDITIONS

2.3.1 General arrangement drawing of the electrical LT panels shall be got approved before fabrication.

2.3.2. The LT panels shall be manufactured from manufacturer having valid CPRI certificate for similar type of panels.

2.3.3 The test certificates of the light fitting, ceiling fan, exhaust fan, cables, wires etc shall be submitted along with the delivery of the materials at site.

2.3.4. Samples of different types of light fitting, ceiling fans and exhaust fan proposed to be used in different areas in the building shall be submitted and approval shall be obtained before ordering the material to site.

2.3.5 The contractor has to do all liasoning works and obtain statutory approval from Electricity board, Electrical inspectorate and any another body for the successful energisation of electrical supply to the building. No charges will be paid to the contractor in this regard. However, statutory fees if any will be paid by HLL. All necessary drawings and documents required for the same has to be prepared and submitted by the contractor with the concurrence and approval of the Engineer – in –charge.

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS

S.No.	MATERIALS	PREFERED MAKE
1	LT UG cables	Gloster / Torrent / Havells / RPG
2	LT cable gland, lugs	Comet / Dowell / Jainson / Hex
3	MCCB	L&T / Siemens / Schneider / GE
4	SDFU, Isolators	L&T / Siemens / Schneider / GE
5	Relays	L&T / GE / Schneider / Siemens.
6	Resin cast CTs	Intrans / Resitech / PGR Powertech
7	Measuring Instruments	AE / Conserv / Rishab / Schneider / L&T
8	Starters /Contractor /Bi metal Relay	L&T / Siemens / Schneider / GE
9	Push Button /Indicating Lamps (LED Type)	Siemens / L&T / Schneider
10	Control Fuse Base with HRC Fuse	L&T / GE / Siemens / Schneider
11	Light fitting	Philips / Wipro / GE
12	Ceiling fan, Wall, Exhaust fans	Crompton / Usha / Bajaj
13	Industrial Exhaust fan, Wall fan	Almonard / Crompton / Bajaj
14	MCBs, DBs, Industrial plugs	Legrand / Schneider / Siemens
15	PVC wires (Copper)	RR Kables / Finolex / Panasonic
16	Cat 6 UTP, telephone, co-axial cable	Finolex / RR Kabel / Panasonic / Belkin
17	Modular Switches	Legrand-Arteor / MK-Aspect / Panasonic-Vision / Crabtree - Murano
18	PVC Conduit & accessories, Casing & capping	Precision / Avon Plast / /Konseal / Balco
19	Light Pole	Bajaj / Crompton / Wipro / GE
20	Cable tray	Profab / Patny / Indiana / Elcon
21	Lamps	Philips / Wipro / GE / Osram

BILL OF QUANTITIES

ABSTRACT

SEC.	DESCRIPTION OF ITEM	AMOUNT (Rs.)
A	CIVIL WORKS	
B	ELECTRICAL WORKS	
	GRAND TOTAL	

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
	Civil works				
1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	sqm	1,370.00		
2	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:With Chlorpyrifos/ Lindane E.C. 20% with 1% concentration.	metre	100.00		
3	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge. in cement mortar	cum	80.00		
4(a)	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. Complete and stacking within 50 metres lead of area beyond 3.00 sqm	each	36.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
(b)	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: G.S. Sheet	sqm	60.00		
(c)	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	35.00		
5(a)	Earth work in excavation by mechanical means (Hydraulic excavator/ manual means) over areas (exceeding 30 cms in depth, 1.5 in width as well as 10 sqm in plan) including disposal of excavated earth lead upto 50 mts & lift upto 1.5 mts, disposed earth to be levelled & neatly dressed. Ordinary rock	cum	370.00		
(b)	Extra for every additional lift of 1.5 m or part thereof in excavation /banking excavated or stacked materials. Ordinary or hard rock	cum	20.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
6	Excavating trenches of required width for pipes, cables, etc, including excavation for sockets, depth upto 1.5 m including getting out the excavated materials, returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layers by ramming, watering etc., stacking serviceable material for measurements and disposal of unserviceable material as directed, within a lead of 50m : Ordinary rock :Pipes, cables exceeding 300 mm dia but not exceeding 600mm dia	metre	150.00		
7	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50 m and lift upto 1.5 m.	cum	210.00		
8(a)	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth.1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	cum	95.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
(b)	Centering and shuttering including strutting, propping etc. and removal of form work for :	sqm	40.00		
9	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement: 6 coarse sand: 12 graded stone aggregate 20mm nominal size) upto plinth level with: Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	25.00		
10	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:1½:3 (1 Cement: 1½ coarse sand: 3 graded stone aggregate 20 mm nominal size).	cum	25.00		
11	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level. 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	95.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
12 (a)	Reinforcement cement concrete work in walls (any thickness). including attached pilasters, buttresses, plinth and string courses. Fillets, columns, pillars, piers, abutments, posts and struts, etc. upto floor five level including cost of centring, shuttering , strutting, propping etc and removal of formwork, finishing and reinforcement.1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size.) Lintels, weather shade, chajja, Foundations of machines etc	cum	95.00		
(b)	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	9.00		
(c)	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m clear span up to floor five level including the cost of required centering, shuttering but excluding the cost of reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size). (for precat slabs over trenches)	cum	15.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
13 (a)	<p>Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing but excluding reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. All works above plinth level upto floor V level</p> <p>(Note :- Cement content considered in this item is @ 370 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately</p> <p>All works above plinth level upto floor V level.</p>	cum	110.00		
b	<p>Add for using extra cement in the items of design mix over and above the specified cement content there in.</p>	qtl	15.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
14	Reinforcement for RCC work including straighting, cutting, bending, placing in position and binding all complete. Thermo Mechanically treated bars (assuming 140kg/cum)	Kg	39,000.00		
15	Centering and shuttering including strutting, propping etc. and removal of formwork for				
15. a	Foundations, footings, bases of columns, etc. for mass concrete	sqm	330.00		
15. b	Lintels, beams, plinth beams, girders, bressumers and cantilevers	sqm	590.00		
15.c	Columns, Pillars, Piers, Abutments, Posts and Struts	sqm	725.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
15. d	Suspended floors, roofs, landings, balconies and access platform	sqm	510.00		
16	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size).	sqm	60.00		
17	Providing and fixing up to floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering complete :1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	360.00		
18	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete. 40mm thick with 20mm nominal size stone aggregate.	sqm	810.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
19	6 mm cement plaster of mix :1:3 (1 cement: 3 fine sand) for ceiling	sqm	700.00		
20	12 mm cement plaster of mix :1:4 (1 cement: 4 fine sand)	sqm	1,920.00		
21	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	sqm	2,190.00		
22	Finishing walls with Premium Acrylic Smooth exterior paint New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	2,190.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
23	Finishing walls with textured exterior paint of required shade: New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm.	sqm	395.00		
24	Stone tile work for wall lining upto 10 m height with special adhesive over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement with an admixture of pigment to match the stone shade. Granite stone of any colour and shade.	sqm	220.00		
25	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade. New work (two or more coats) over and including water thinnable priming coat with cement primer	sqm	2,620.00		
26	Supplying & fixing rolling shutters of approved make, made of required laths interlocked together through their entire length & joined together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides & arrangements for inside & outside locking with push & pull operation complete including the cost of providing & fixing necessary 27.5 cm long wire springs grade no 2 & MS top cover of required thickness for rolling shutters.				

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
26. a	80x1.25 mm MS laths with with 1.25mm thick top cover	sqm	50.00		
26. b	Providing and fixing ball bearing for rolling shutter	Nos	8.00		
26.c	Extra for providing mechanical device chain and crank operation for operating rolling shutters. Exceeding 16.80 sqm in area	sqm	50.00		
27	Painting with synthetic enamel paint of approved brand and manufacture to give and even shade. Two or more coats on new work	Sqm	135.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
28	Providing and fixing M.S. grills of required pattern in frames of etc. with M.S. flats, square or round bars etc. including priming coat windows with approved steel primer all complete. Fixed to openings (assuming 20 kg/sqm)	kg	1,390.00		
29 (a)	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge including Door handle, lock and stopper etc.	Sqm	15.00		
29 (b)	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With stainless steel cover plate minimum 1.25 mm thickness	each	3.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
30	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	1,670.00		
31	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber /neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	1,225.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
32	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.5 mm thickness	Sqm	165.00		
33	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides	sqm	125.00		
34	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Each	444.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
35	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete : 250x10 mm	Each	184.00		
36	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 75 mm	Each	64.00		
37	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and modulus of rupture greater than of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm (The cost of tile not to be less than Rs.90/sqft.)	sqm	910.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
38	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.(The cost of tile not to be less than Rs.55/sqft.)	sqm	180.00		
39	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.(The cost of tile not to be less than Rs.45/sqft.)	sqm	270.00		
40	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : 25 mm thick.(The cost of tile not to be less than Rs.40/sqft.)	sqm	230.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
41	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of fine sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	sqm	375.00		
42	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade, Area of slab over 0.50 sqm.	sqm	145.00		
43	Providing edge moulding to 18mm thick marble stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Granite work.	m	200.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
44	Extra for providing opening of required size & shape for wash basins/ kitchen sink in kitchen platform, vanity counters and similar location in marble/Granite/stone work including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	each	19.00		
45	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured.	sqm	400.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
46	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	kg	1,950.00		
47	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the rate of 1200 mm centre to centre to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm	sqm	826.80		

	<p>long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm or both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :12.5 mm thick tapered edge gypsum moisture resistant board.</p>				
48 (a)	<p>Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.</p>	kg	660.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
(b)	<p>Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.</p>	sqm	450.00		
(c)	<p>Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm + 0.05 % total coated thickness, Zinc coating 120gsm as per IS: 277 in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :Ridges plain (500 - 600mm).</p>	metre	12.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
(d)	Gutter.(600 mm over all girth).	metre	12.00		
49	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand) including the cost of required centering, shuttering complete. 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	2.00		
50	Supplying and fixing hand rails with 304 grade polished stainless steel pipe 2mm wall thickness for stair cases. 50mm diameter for hand rails and 100 mm dia for newel post and 25mm dia balusters 30cm c/c and 2nos horizontals welded together, including all necessary fittings etc.. as per the drawing and direction of the Engineer – in – charge. Hand rails shall be fixed in the floor/steps with expansion hold fasters of required size including drilling etc. complete	kg	105.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
51	Providing and fixing factory made PVC door frame made of PVC extruded section having overall dimension of 48 x 40 mm (tolerance + 1 mm) with wall thickness 2.0 mm + 0.2 mm, corners of the door frame to be mitred and jointed by means of plastic/M.S. galvanised brackets and stainless steel screws. The hinge side vertical of the frames reinforced by galvanised 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 manufacturers specification and direction of Engineer - in - charge (Sintex Plasopan or duroplast) 48 x 40 x 2.0 mm thick PVC frame	metre	75.00		
52	Providing and fixing 30 mm thick factory made PVC rigid foam panelled door shutters manufactured by M/S. Rajshri or equivalent made from M.S.tube of 19 gauge thickness, size 19 x19 mm for styles and 15 x 15 mm for top and bottom rails, covered with heat moulded PVC "C" channel of 5 mm thick sheet and 30 x50 mm wide to form styles and 5 mm thick and 75 mm wide PVC sheets for top rail, lock rail and bottom rail on either side and 5 mm thick, 20 mm wide cross PVC sheet as gap insert for top rail ad bottom rail, panelling of 5 mm thick PVC sheet fitted in the M.S.frame welded/ sealed to the styles and rails with 5 x 30 mm PVC sheet beading on either side and joined together with solvent cement adhesive etc., complete as per manufacturers specification and direction of Engineer-in-charge fixed to frames with 4 Nos. M.S.powder coated butt hinges (for W.C. and bathroom shutters)	sqm	26.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
53	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete. Twin rubber stopper	each	5.00		
Plumbing and Sanitary works					
54 (a)	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid	each	5.00		
(b)	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required : White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	each	6.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
55	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors wherever required : Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistern.	Each	6.00		
56	Providing and fixing White Vitreous China Wash basin size 550x400 mm with C.I. brackets, 15 mm C.P. brass pillar tap, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require.	Each	20.00		
57	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	Each	9.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
58	Providing and fixing C.P. brass long body bib cock 15 mm nominal bore of approved quality conforming to IS standards and weighing not less than 690 gms.	Each	12.00		
59	Providing and fixing 20 mm nominal bore, 89 mm long, weighing not less than 88 gms PTMT stop cock of approved quality and colour.	Each	10.00		
60	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	Each	15.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
61	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Rectangular shape 1500x450 mm	Each	5.00		
62	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design : 100x100 mm size P type With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Nos	11.00		
63	Providing and fixing 100 mm sand cast Iron grating for gully trap.	each	11.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
64	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	3.00		
65	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	1.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
66	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps thermal stability for hot & cold water supply, including all,at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.Concealed work, including cutting chases and making good the walls etc.15 mm nominal outer dia Pipes	meter	50.00		
67	Providing & fixing chlorinated polyvinyl chloride (CPVC) Pipes, having thermal stability for hot & cold water supply incl all CPVC plain & brass threaded fittings inc fixing the pipe with clamps at 1 m spacing. This incl jointing of pipes & fittings with one step CPVC solvent cement , trenching, refilling & testing of joints, complete as per direction of engineer in charge (external work)				
a	25mm nominal outer dia pipes	meter	150.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
b	32mm nominal outer dia pipes	meter	160.00		
c	40mm nominal outer dia pipes	meter	400.00		
68	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:				
a	100 mm diameter S.W. pipe	metre	60.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
b	150 mm diameter S.W. pipe	metre	150.00		
69	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.	Each	8.00		
70	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Semi rigid pipe 40 mm dia	each	16.00		
71	Providing and fixing soil, waste and vent pipes : 100 mm dia. Sand cast iron S&S pipe as per IS: 1729.	metre	150.00		
	Total				

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
	Appendix - A -Water tanks (Over head and Under Ground)				
1(a)	Earth work in excavation by mechanical means (Hydraulic excavator/ manual means) over areas (exceeding 30 cms in depth, 1.5 in width as well as 10 sqm in plan) including disposal of excavated earth lead upto 50 mts & lift upto 1.5 mts, disposed earth to be levelled & neatly dressed. Ordinary rock	cum	680.00		
(b)	Extra for every additional lift of 1.5 m or part thereof in excavation /banking excavated or stacked materials. Ordinary or hard rock	cum	170.00		
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50 m and lift upto 1.5 m.	cum	7.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
3	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth.1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	cum	55.00		
4	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	120.00		
5(a)	Reinforcement cement concrete work in walls (any thickness). including attached pilasters, buttresses, plinth and string courses. Fillets, columns, pillars, piers, abutments, posts and struts, etc. upto floor five level including cost of centring, shuttering, strutting, propping etc and removal of formwork, finishing and reinforcement.1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size.) Lintels, weather shade, chajja etc	cum	15.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
(b)	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	60.00		
6	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete. Thermo Mechanically treated bars (assuming 140kg/cum)	Kg	9,500.00		
7	Centering and shuttering including strutting, propping etc. and removal of form for				
(a)	Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.	sqm	640.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
(b)	Lintels, beams, plinth beams, girders, bressumers and cantilevers	sqm	40.00		
(c)	Columns, Pillars, Piers, Abutments, Posts and Struts	sqm	20.00		
(d)	Suspended floors, roofs, landings, balconies and access platform	sqm	25.00		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
8(a)	12 mm cement plaster of mix :1:4 (1 cement: 4 fine sand) with extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufactures.	sqm	620.00		
(b)	12 mm cement plaster finished with a floating coat of neat cement of mix : 1:4 (1 cement: 4 fine sand)	sqm	835.00		
9	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	sqm	50.00		
	Total Appendix A				
	Grant total				

ELECTRICAL WORKS					
SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
A. LT Wiring					
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.				
1.1	Group C	Each	405		
2	Wiring for twin control light point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.	Each	5		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
3	Wiring for circuit/submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface medium class PVC conduit as required.				
3.1	2 x 1.5 sq.mm + 1 x 1.5 sq.mm earth wire	m	1400		
3.2	2 x 2.5 sq.mm + 1 x 2.5 sq mm earth wire	m	2100		
3.3	2 x 4.0 sq.mm + 1 x 4.0 sq mm earth wire	m	1600		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
3.4	4 x 6 sq. mm + 2 x 6 sq. mm earth wire	m	300		
4	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
4.1	20 mm	m	800		
4.2	25 mm	m	500		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
5	Supplying and drawing 2 pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.	m	600		
6	Supplying and fixing Telephone socket outlet on the existing modular plate & switch box including connections but excluding modular plate etc. as required.	Each	50		
7	Supplying and fixing stepped type electronic fan regulator-modular on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	50		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
8	Supply and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	80		
9	Supplying and fixing following size / modules, PVC box alongwith modular base & cover for modular telephone/ data sockets in recess / surface etc as required.				
9.1	1 or 2 module	Each	50		
10	Supplying and fixing suitable size PVC box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.	Each	190		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
11	Supplying and fixing suitable size PVC box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	Each	100		
12	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	Each	100		
13	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, false ceiling with chain and hook including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	165		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
14	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required.	Each	50		
15	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
15.1	Upto 450 mm sweep	Each	40		
16	Supplying and fixing extra conduit down rod of 20 cm length G.I. pipe 15 mm dia, heavy gauge including painting etc. as required. (Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Each	140		
Total Amount in Rs					

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
B. MCBs, DBs and Cable Trays					
1	Providing and fixing 100 A, 16kA breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.	Each	5		
2	Supplying and fixing following ways surface/recess mounting, vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, with provision of 100 amps TP 16 KA MCCB as incomer, interconnection between incomer MCCB and bus bars (but without MCB's/ MCCB) as required. (Note: Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
2.1	4 Way TP	Each	2		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
2.2	8 Way TP	Each	3		
3	Supplying and fixing following way prewired SP&N MCB distribution board of steel sheet for 240 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required. (But without MCB/ RCCB/ Isolator)				
3.1	8 way, Double door	Each	5		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
3.2	12 way, Double door	Each	5		
4	Supplying and fixing following way prewired vertical type TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, terminal connectors for all incoming and outgoing circuits, duly prewired with adequate size of FR PVC insulated copper conductor upto the terminal connector/ neutral link, earthing etc as required (But without MCB/ RCCB/ Isolator). (Note: Prewired vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
4.1	6 way, Double door	Each	3		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
4.2	8 way, Double door	Each	3		
5	Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				
5.1	4 way, Double door	Each	4		
5.2	6 way, Double door	Each	4		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
5.3	8 way, Double door	Each	2		
6	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
6.1	40 amps	Each	5		
6.2	63 amps	Each	5		
7	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
7.1	40 amps	Each	4		
7.2	63 amps	Each	6		
8	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
8.1	25 amps	Each	4		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
8.2	40 amps	Each	4		
8.3	63 amps	Each	2		
9	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
9.1	25 amps	Each	5		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
9.2	40 amps	Each	4		
9.3	63 amps	Each	6		
10	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
10.1	Single pole	Each	200		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
10.2	Double pole	Each	10		
10.3	Triple pole	Each	18		
10.4	Triple pole and neutral	Each	20		
11	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	80		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
12	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32amps 240 volts "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	Each	10		
13	Supply and fixing TP sheet steel enclosure on surface recess along with 16/25/32/ amps 415V "C" curve TP MCB complete with connections, testing and commissioning etc as required.	Each	10		
14	Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	15		
15	Supplying and fixing 30 amps, 415 volts, TPN industrial type, socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 30 amps "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	10		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
16	Supply and installing following size of perforated GI cable trays with perforations not more than 17.5% in convenient sections, joined with connectors, GI suspenders including nuts and bolts, bends, tees etc as required				
16.1	150mm x 50 mm depth x 1.6mm thick	m	150		
16.2	300mm x 50 mm depth x 1.6mm thick	m	100		
Total Amount in Rs					
C. Earthing & Lightning protection					
1	Earthing with GI earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Each	4		

Sl. No.	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
2	Supply and laying 25mm x 5mm GI strip at 0.5m below ground as strip earth electrode, including connection / terminating with GI, nut, bolt, spring washer etc as required. (Jointing shall be done by overlapping and with 2 sets of GI nut bolt & spring washer spaced at 50mm).	m	100		
3	Providing and fixing 25 mm X 5 mm GI strip on surface or in recess for connections etc. as required.	m	200		
4	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	m	50		
5	Providing and fixing 8 SWG dia G.I. wire on surface or in recess for loop earthing as required.	m	400		
Total Amount in Rs					

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
D. MV Cable laying and Termination					
1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing masonry open duct as required.				
1.1	Upto 35 sq. mm	m	70		
1.2	Above 35 sq. mm and upto 95 sq. mm	m	80		
2	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
2.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	m	280		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
2.2	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	m	150		
3	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.				
3.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	m	100		
3.2	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	m	120		
4	Supplying and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including inscription duly engraved as required.	Each	50		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
5	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
5.1	3.5 x 50 sqmm cable	Each	2		
5.2	3.5 x 35 sqmm cable	Each	8		
5.3	3.5 x 25 sqmm cable	Each	10		
5.4	4 x 16 sqmm cable	Each	12		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
5.5	4 x 10 sqmm cable	Each	16		
5.6	4 x 6 sqmm cable	Each	20		
6	Providing, laying and fixing of 100mm dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc as required	m	60		
7	Providing, laying and fixing of 150 mm dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required.	m	80		
	Total Amount in Rs				

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
A. LT Cables					
1	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date.				
1.1	3.5 x 50 sqmm cable	m	200		
1.2	3.5 x 35 sqmm cable	m	300		
1.3	3.5 x 25 sqmm cable	m	250		
1.4	4 x 16 sqmm cable	m	350		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
1.5	4 x 10 sqmm cable	m	380		
1.6	4 x 6 sqmm cable	m	250		
	Total Amount in Rs				
B. Light Fixtures					
1	Supply of 1x28W flourescent tube fitting, powder coated CRCA steel channel complete with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamp etc complete as required. (Philips TMS122M 1xTL-5-28W EBT / Wipro WIF 90128 SG / GE GET CI 1x28 C/S HF)	Each	65		
2	Supply of 2x28W flourescent tube fitting, powder coated CRCA steel channel complete with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamp etc complete as required. (Philips TMS122M 1xTL-5-28W EBT / Wipro WIF 90228 SG / GE GET CI 2x28 C/S HF)	Each	50		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
3	Supply of 2x28W surface mounting fluorescent tube light luminaire with mirror optic with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamps etc complete as required. (Philips TPS814 2xTL5-28W EPB D8 / GE PFS 228 MI O)	Each	15		
4	Supply and installation of recess mounted type 2x36W CFL cleanroom light fitting with option of rear opening / front opening in robust CRCA housing, glass cover with all electrical accessories like electronic ballast, lamp holder, 36W CFL lamps, mounting chain, hook etc complete as required. (Philips FCS650 2xPL-L36W EBP FOP GT / Wipro WIP 43236 SGA / GE CRP 236CFL BO)	Each	10		
5	Supply and installation of 2x36W recess mounted direct - indirect downlight luminaire, with translucent acrylic diffuser, powder coated CRCA housing complete with all electrical accessories like electronic ballast, lamp holder, 36W CFL lamp, mounting chain, hook etc complete as required. (Philips FBS580 2xPL-L36W IC OD DF-WH / Wipro WVP 76236 SGA)	Each	65		
6	Supply of 4x28W surface mounting luminaire with reflectors, closed version with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamps etc complete as required. (Wipro WHF 30428 SGW / Philips TPS325 4xTL-5-28W EBP)	Each	6		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
7	Supply of surface mounted 2x18 watts down light fixture, with glossy reflector, CRCA sheet housing, complete with all accessories like electronic ballast, 18W CFL lamp etc complete as required. (Philips FCS105 M 2xPL-C/4P 18W EBW / GE CFL C 2x18 DN FG S)	Each	5		
8	Supply of 1x18W surface mounted luminaire with opal acrylic diffuser complete with all electrical accessories like electronic ballast, lamp holder, 18W T8 lamps etc. complete with all mounting accessories etc as required. (Philips TMS520/ 118 / Wipro WRF 21118 / GE TRI 118)	Each	20		
9	Supply and installation of LED Ltg, recess type, LED downlighter with special frosted diffuser. Wipro Type LD46-006-XXX-WH-XX / Philips BBS180 I x DLED -5000 PSU WH / GE GDR006, 56S0	Each	80		
10	Supply of ceiling fan 1200 mm sweep, double ball bearing, approved colour and quality with original down rod, suspension shackle, canopy etc without regulator complete with all accessories as required. (Usha Sonata max/ Crompton High Breeze)	Each	50		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
11	Supply and installation of 400 mm sweep, wall fan, swinging type with speed control, necessary adapter, of approved colour, for single phase 230 volt, 50Hz AC supply complete with motor, capacitor all accessories as required complete. (Usha Helix High speed or Equi).	Each	25		
12	Supply of heavy duty exhaust fan 450 mm sweep, 900 rpm, metal blades of approved colour, for single phase 230 volt, 50Hz AC supply complete with motor, capacitor and all accessories as required complete.	Each	20		
13	Supply of 250mm sweep, 1250 rpm, louvered ventilating fan suitable for single phase 230 volt, 50Hz AC supply complete with motor, capacitor, louvers/shutters and all accessories as required complete. (Make : Usha Crisp Air or equivalent)	Each	20		
Total Amount in Rs					
C. Telephone system					
1	Supply and laying 5 pair 0.5 sqmm FR PVC insulated annealed copper conductor, jelly filled armoured telephone cable in surface / through pipe / underground including excavation and re-filling including all accessories as required.	m	100		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
2	Supply and laying 20 pair 0.5 sqmm FR PVC insulated annealed copper conductor, jelly filled armoured telephone cable in surface / through pipe / underground including excavation and re-filling including all accessories as required.	m	50		
3	Supply and Installation of 10 pair MDF box, back mount frame and original krone connectors with all accessories.	Each	5		
4	Supply and Installation of 50 pair MDF box, back mount frame and original krone connectors with all accessories.	Each	1		
5	Supply and Installation of 20 pair MDF box, back mount frame and original krone connectors with all accessories.	Each	1		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
6	Supply & fixing modular type computer outlet (RJ-45) with modular base and cover plate, GI box complete with all accessories, connection etc. complete as required.	Each	45		
7	Supply and laying 4 pair CAT 6 UTP cable in the existing surface / recessed steel / PVC conduit as required.	m	200		
Total Amount in Rs					
D. External lighting					
1	Supply & installation of Hot dipped Galvanised (internally and externally), seamless, octagonal pole of overall length 8 M with single arm bracket of 1.5m length 48mm dia x 3.25mm thick with standard arm cap. The pole shall have inbuilt cable loop in loop out with flush door and locking facility. The bottom dia of the pole shall be 135mm and top 70mm with 3mm sheet thickness. The pole shall be with base plate of 225x225x16mm and 4nos required size of foundation bolt. The pole shall be mounted on suitable size foundation (design to be got	Each	25		

	approved) with baseplate arrangement and provided with 4A SP C curve MCB, loop in loop out terminals block, required dia GI / PVC pipe shall be provided in the foundation for taking cable in & out from the pole, 3Cx1.5sqmm unarmoured PVC insulated round copper cable from loop in loop out to light fixture etc with all required accessories. The cost of the civil foundation is not considered in this item.				
2	Supply & installation of integral, IP65, Post top luminaire with diecast aluminium powder coated housing, UV stabilized polyethylene bowl suitable for 1x70W MH lamp. The light fitting shall be mounted on 3mtr length pole, pole base, with all necessary accessories including 70W MH lamp. The cost of the civil foundation shall be measured along with civil items (Philips HPS111 1xCDMET70W IC or equivalent)	Each	8		
3	Supply & installation of IP65, bollard luminaire with diecast aluminium powder coated housing, UV stabilized polyethylene bowl suitable for 1x18W CFL lamp including all necessary accessories. The item includes 18W CFL lamp. The cost of the civil foundation shall be measured along with civil items.(Philips HCS360 1xPLC/2P18W GR (antique silver) or equivalent)	Each	8		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
4	Supply, installation, testing & commissioning of IP66,150W MH street lighting, with die cast aluminium housing, anodised aluminum reflector, toughened glass, stainless steel toggle, heavy duty copper ballast, pf capacitor, 1x150W MH lamp etc as required. The light fitting shall be suitably installed with all required accessories to poles. The item shall include 3C x 1.5 sqmm PVC insulated copper unarmoured cable for connecting between the luminaire and the loop in loop out box. (Similar to Wipro WST 71150 or Philips CRP 330 1xSONT-150W TP or GE GX150SVNG).	Nos	25		
5	Supply and installation of IP65,70W MH street light luminaire, with die cast aluminium housing, POT optics, toughened glass, stainless steel toggle, heavy duty copper ballast, pf capacitor, 1x70W MH lamp etc as required. The light fitting shall be suitably installed with GI pipe and all required accessories to outside wall of building. The item shall include 3C x 1.5 sqmm PVC insulated copper unarmoured cable for connecting between the luminaire and the junction box. (Similar to Philips CRP320 1xCDMTT70W FG TS or equivalent).	Nos	15		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
6	Supply, Installation, Testing & Commissioning of Street lighting panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, free standing, floor mounting, dust and vermin proof, powder coated, outdoor type, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
	Incomer				
	63A, TPN, switch disconnecter unit (Isolator), AC23, 415V, 50Hz, complete with handle assembly having door interlock - 1 no.				
	Busbar				
	1 Set of 100 A TPN busbars of high conductivity electrolytic quality Aluminium alloy.				
	Instruments				
	2A, C curve SP MCB - 3 nos.				
	RYB indication lamp, LED type - 3 nos.				
	1 No 3 phase Digital Multi function meter to read V, A, F Acc class 1.				
	60/5A 5VA class 1 resin cast CT - 1 set				
	Outgoing.				
	25A TP+NL C curve MCB - 6 nos.				

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
	32A AC1 duty 4P Power contactor - 6 nos.				
	24Hr Timer with all accessories - 3 nos.				
		Each	1		
	Total Amount in Rs				
E. Miscellaneous					
1	Supplying and fixing following rating, 415 Volts, "C" series, miniature circuit breaker suitable for power loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.		.		
1.1	40A TP MCB	Each	5		
1.2	63A TP MCB	Each	5		

SI No	Description	Unit	Qty	Rate (Rs. in words & in figures)	Amount (Rs. in words & in figures)
2	Supply and fixing FP sheet steel enclosure on surface recess along with 40 amps 415V FP Isolator complete with connections, testing and commissioning etc as required.	Each	5		
3	Supply and providing 6 mm thick & 1 m wide electrical grade chequered type rubber mat to withstand 3.3 KV dielectric strength conforming to IS 5429/ 1969.	m	10		
4	Liasoning works and obtain statutory approval from Electricity Board, Electrical inspectorate and any another body for the successful energisation of electrical supply to the building. All necessary drawings and documents required for the same has to be prepared and submitted by the Contractor with the concurrence and approval of the Engineer-in-charge.	Job	1		
-	Total Amount in Rs				
-					
	Grand Total Amount in Rs				