

TENDER

FOR

**CONSTRUCTION OF BUILDING PHASE II AT
KERALA STATE CENTRE FOR ADVANCED
PRINTING & TRAINING "CAPT",
THIRUVANANTHAPURAM.**

**PART-III
PRICE BID CONDITIONS**

TENDER No. HITES/IDS/18/68 dated 06.07.2018

JULY 2018



HLL INFRA TECH SERVICES LIMITED
(A Fully owned Subsidiary of HLL Lifecare Limited)
HLL Bhavan- Golden Jubilee block
Mahilamandiram Road
Poojappura, Thiruvananthapuram-695012
Ph: 0471 2775500

CONTENTS

| S.NO | ITEM | PAGE NO. |
|-------------|-----------------------|-----------------|
| 1. | Commercial Conditions | 2-5 |
| 2. | Special Conditions | 6 |

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 including GST applicable FOR Government works for Construction of Building Phase II at Kerala State Centre for Advanced Printing & Training "CAPT", Thiruvananthapuram.

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.

1.1 UNIT RATES

1.1.1 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.

1.6. 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.

2 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 contact.

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 Defect liability period for the entire work shall be three years** from the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

ALL ROWS SHALL BE FILLED, THIS IS MANDATORY

ABSTRACT

| Sl. No. | Item | Amount |
|----------------|--------------------------------|---------------|
| 1 | Civil works(PARTA) | |
| 2 | Plumbing works(PARTB) | |
| 3 | Lift(PARTC) | |
| 4 | Electrical works(PARTD) | |
| | GRAND TOTAL | |

Note: Price should be inclusive of all taxes and duties including GST.

Signature of the Contractor with date

| Civil (PART A) | | | | | | |
|-----------------------|-----------------|---|------------|----------------|----------------------------------|------------------------------------|
| Item No | DSR code | Details of items | Qty | Unit | Rate in words and figures | Amount in words and figures |
| 1 | 2.6.1 | Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. All kinds of soil | 150.00 | m ³ | | |
| 2 | 2.6.1 + 2.26.1 | Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift 1.5m to 3.0m, disposed earth to be levelled and neatly dressed. All kinds of soil | 85.00 | m ³ | | |
| 3 | 2.8.1 | Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil. | 15.00 | m ³ | | |

| | | | | | | |
|---|----------|--|--------|----------------|--|--|
| 4 | 2.25 | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m | 232.00 | m ³ | | |
| 5 | 1.1.2.8 | Conveying and disposing off excavated excess earth from the site | 5.00 | m ³ | | |
| 6 | 2.34.1 | Supplying chemical emulsion in sealed containers including delivery as specified Chlorpyriphos/ Lindane emulsifiable concentrate of 20% | 131.00 | L | | |
| 7 | 2.35.3.1 | Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor : With Chlorpyriphos/Lindane E.C. 20% with 1% concentration | 235.00 | m ² | | |
| 8 | 4.1.8 | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: CC 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).for foundation and inside flooring | 45.00 | m ³ | | |
| 9 | 4.17 | Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand including finishing the top smooth | 40.00 | m ² | | |

| | | | | | | |
|----|--------|---|--------|----------------|--|--|
| 10 | 5.33 | Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. | | | | |
| | | (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately). | | | | |
| a | 5.33.1 | All works upto plinth level. | 50.00 | m ³ | | |
| b | 5.33.2 | All works above plinth level upto floor V level. | 167.00 | m ³ | | |
| 11 | 5.35 | Add for using extra cement in the items of design mix over and above the specified cement content therein | 110.00 | Qntl | | |
| 12 | 5.9 | Centering and shuttering including strutting, propping etc. and removal of form for : | | | | |
| a | 5.9.1 | Foundations, footings, bases of columns, etc. for mass concrete. | 57.00 | m ² | | |
| b | 5.9.2 | Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc. | 47.00 | m ² | | |

| | | | | | | |
|----|----------|--|--------|----------------|--|--|
| c | 5.9.3 | Suspended floors, roofs, landings, balconies and access platform. | 550.00 | m ² | | |
| d | 5.9.5 | Lintels, beams, plinth beams, girders, bressumers and cantilevers. | 525.00 | m ² | | |
| e | 5.9.6 | Columns, Pillars, Piers, Abutments, Posts and Struts. | 510.00 | m ² | | |
| f | 5.9.7 | Stairs, (excluding landings) except spiral-staircases. | 35.00 | m ² | | |
| g | 5.9.19 | Weather shade, Chajjas, corbels etc., including edges. | 55.00 | m ² | | |
| h | 5.9.16.1 | Edges of slabs and breaks in floors and walls: Under 20 cm wide | 270.00 | m | | |
| 13 | 5.11.1 | Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured) Suspended floors, roofs, landing, beams and balconies (Plan area to be measured). | 560.00 | m ² | | |

| | | | | | | |
|----|--------|---|----------|----------------|--|--|
| 14 | 5.22.6 | Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete Thermo-Mechanically Treated bars. | 28210.00 | kg | | |
| 15 | 6.1.2 | Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand) | 5.00 | m ³ | | |
| 16 | 6.4.2 | Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand) | 85.00 | m ³ | | |
| 17 | 6.13.2 | Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in super structure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand) | 140.00 | m ² | | |
| 18 | 6.15 | Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry. | 140.00 | m ² | | |
| 19 | LMR | Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately). Anjili wood | 0.25 | m ³ | | |

| | | | | | | |
|----|--------|--|-------|----------------|--|--|
| 20 | LMR | Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge. Anjili wood 35mm thick shutters | 9.10 | m ² | | |
| 21 | LMR | Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick : Anjili wood | 7.00 | m ² | | |
| 22 | 9.14 | Extra for providing ISI marked Stainless Steel butt hinges instead of M.S. pressed butt hinges bright finished of required size with necessary screws. (Shutter area to be measured). | 9.10 | m ² | | |
| 23 | 9.74.1 | Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete : 250x10 mm | 15.00 | Nos | | |
| 24 | 9.88 | Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality). | 3.00 | Nos | | |

| | | | | | | |
|----|----------|--|--------|-----|--|--|
| 25 | 9.53 | 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). | 18.00 | Nos | | |
| 26 | 21.1.1.2 | 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) : For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron) | 550.00 | kg | | |

| | | | | | | |
|----|----------|--|--------|----------------|--|--|
| 27 | 21.1.2.2 | 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) | 370.00 | kg | | |
| 28 | 21.3.2 | 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 5.50 mm thickness | 43.00 | m ² | | |
| 29 | 9.97 | 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 : | | | | |
| a | 9.97.4 | 150x10 mm | 78.00 | Nos | | |

| | | | | | | |
|----|---------|--|--------|-----|--|--|
| 30 | 9.101.2 | 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 | 5.00 | Nos | | |
| 31 | 14.35.1 | Providing and fixing bright finished brass hard drawn hooks and eyes : 300 mm | 39.00 | Nos | | |
| 32 | 10.28 | Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge. (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) | 165.00 | kg | | |

| | | | | | | |
|----|---------|--|--------|------|--|--|
| 33 | 9.48.2 | Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.Fixed to openings /wooden frames with rawl plugs screws etc. | 700.00 | kg | | |
| 34 | 10.17 | Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop, all as per standard design complete. | 12.00 | Each | | |
| 35 | 9.117.1 | Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (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 Extruded section profile size 48x40 mm | 73.00 | m | | |

| | | | | | | |
|----|---------|---|-------|----------------|--|--|
| 36 | 9.118.2 | <p>30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. as per manufacturer's specification and direction of Engineer-in-charge.</p> | | | | |
| | | <p>The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete</p> | 23.00 | m ² | | |

| | | | | | | |
|----|---------|--|--------|----------------|--|--|
| 37 | 10.6.1 | Supplying 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 specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 – part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25mm M.S. laths with 1.25 mm thick top cover. | 6.25 | m ² | | |
| 38 | 10.7 | Providing and fixing ball bearing for rolling shutters. | 2.00 | Each | | |
| 39 | 11.41.2 | Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete.Size of Tile 600x600 mm: (Lowest retail price not less than Rs. 900/m2) | 200.00 | m ² | | |

| | | | | | | |
|----|---------|---|--------|----------------|--|--|
| 40 | 11.46.2 | Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer) with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours & shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm (Lowest retail price not less than Rs.900/m ²) | 9.00 | m ² | | |
| 41 | 11.26 | 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 | 215.00 | m ² | | |
| 42 | 11.27 | Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete | 9.00 | m ² | | |

| | | | | | | |
|----|---------|--|-------|----------------|--|--|
| 43 | 8.2.2.2 | Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, flooring, 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. | 43.00 | m ² | | |
| 44 | 8.5 | 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. | 10.00 | Each | | |

| | | | | | | |
|----|-------------------------|---|--------|----------------|--|--|
| 45 | 11.36 | Providing and fixing Ist quality ceramic glazed wall tiles 300x450 mm size 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. | 185.00 | m ² | | |
| 46 | 11.40 | Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete. | 47.00 | m ² | | |
| 47 | 8.9.1.2 Analys is | Stone tile (polished) work for wall lining over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement omplete...:18mm thick Granite of any colour and shade.to the front side of lift room | 26.00 | m ² | | |

| | | | | | | |
|----|----------------|--|--------|----------------|--|--|
| 48 | 8.3.2 | Providing edge moulding to 18mm thick granite stone including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge: to the front side of lift room | 16.00 | m | | |
| 49 | 13.4.1 | 12 mm cement plaster of mix 1:4 (1 cement: 4 coarse sand) Inside walls | 630.00 | m ² | | |
| 50 | 13.2.1 | 15 mm cement plaster on the rough side of single or half brick wall of mix :1:4 (1 cement: 4 fine sand) for outside walls | 510.00 | m ² | | |
| 51 | 13.16.1 | 6 mm cement plaster of mix : 1:3 (1 cement: 3 fine sand) for under side of roof slab and beams | 570.00 | m ² | | |
| 52 | 22.14.1 | Grading roof for water proofing treatment with Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 gradedstone aggregate 20 mm nominal size) | 25.00 | m ³ | | |
| 53 | 13.9.1 + 13.21 | Cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement.12 mm cement plaster including providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers. to the top surface of roof slab and sunshade inside of sump step etc. | 300.00 | m ² | | |

| | | | | | | |
|----|---------|---|---------|----------------|--|--|
| 54 | 13.80 | Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete. | 630.00 | m ² | | |
| 55 | 13.43.1 | Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : water thinnable cement primer | 1200.00 | m ² | | |
| 56 | 13.47.1 | Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade New work (Two or more coats applied @ 1.43 ltr/ 10 sqm. over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm). | 510.00 | m ² | | |
| 57 | 13.60.1 | Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work. | 1200.00 | m ² | | |
| 58 | 13.61.1 | Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :Two or more coats on new work. | 65.00 | m ² | | |

| | | | | | | |
|----|------|--|-------|----------------|--|--|
| 59 | 22.5 | <p>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 :</p> <p>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.</p> <p>b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing 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</p> | 48.00 | m ² | | |
| | | Total Amount | | | | |

Plumbing PART B

| Item No | DSR code | Details of items | Unit | Quantity | Rate in words and figures | Amount in words and figures |
|----------------|-----------------|---|-------------|-----------------|----------------------------------|------------------------------------|
| 1 | 17.1.1 | 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. (Make: Hindware, Jaquar, Parryware). Materials should be selected by the Engineer in charge | Each | 2 | | |
| 2 | 17.3.1 | Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid. (Make: Hindware, Jaquar, Parryware): Materials should be selected by the Engineer in charge | Each | 8 | | |

| | | | | | | |
|---|--------|--|------|------|--|--|
| 3 | 17.5 | 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 : (Make: Hindware, Jaquar, Parryware): Materials should be selected by the Engineer in charge | | | | |
| a | 17.5.3 | Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistern. | Each | 2 | | |
| 4 | 8.10.2 | Providing and fixing stone slab table rubbed, edges rounded and polished of size 75x50 cm deep and 1.8 cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth. Granite Stone of approved shade. | Sqm | 1.00 | | |

| | | | | | | |
|---|-----------|--|------|----|--|--|
| 5 | 17.7.2 | Providing and fixing wash basin/counter wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar taps. (Make: Hindware, Jaquar, Parryware): Materials should be selected by the Engineer in charge | Each | 10 | | |
| 6 | 17.28.2.2 | Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe 40 mm dia | Each | 10 | | |
| 7 | 17.32.2 | 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 453x357mm | | | | |
| a | 17.32.2 | Rectangular shape 453x357mm | Each | 4 | | |
| 8 | 17.34.1 | Providing and fixing toilet paper holder :C.P. Brass | Each | 12 | | |

| | | | | | | |
|----|---------|---|-------|-------|--|--|
| 9 | 17.73.2 | 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 | 14 | | |
| 10 | 18.7 | Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Make: Supreme, Finolex, Prince Internal work - Exposed on wall | | | | |
| b | 18.7.2 | 20 mm nominal outer dia .Pipes. | Metre | 5.00 | | |
| c | 18.7.3 | 25 mm nominal outer dia .Pipes | Metre | 60.00 | | |
| d | 18.7.4 | 32 mm nominal outer dia .Pipes. | Metre | 60.00 | | |

| | | | | | | |
|----|--------|--|-------|-------|--|--|
| 11 | 18.8 | Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps 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. Make: Supreme, Finolex, Prince Concealed work including cutting chases and making good the walls etc. | | | | |
| a | 18.8.1 | 15 mm nominal outer dia .Pipes | Metre | 20.00 | | |
| b | 18.8.2 | 20 mm nominal outer dia .Pipes | Metre | 20.00 | | |
| c | 18.8.3 | 25 mm nominal outer dia .Pipes. | Metre | 10.00 | | |
| d | 18.8.4 | 32 mm nominal outer dia .Pipes. | Metre | 3.00 | | |

| | | | | | | |
|----|----------|--|-------|----|--|--|
| 12 | 18.9 | Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. Make: Supreme, Finolex, Prince External work | | | | |
| a | 18.9.3 | 25 mm nominal outer dia .Pipes. | Metre | 30 | | |
| 13 | 18.17 | Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : | | | | |
| a) | 18.17.1A | 20 mm nominal bore | Each | 2 | | |
| b) | 18.17.1 | 25 mm nominal bore | Each | 2 | | |
| c) | 18.17.2 | 32 mm nominal bore | Each | 2 | | |
| 14 | 18.18 | Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete | | | | |
| a | 18.18.2 | 20 mm nominal bore | Each | 2 | | |
| 15 | 18.21 | Providing and fixing uplasticised PVC connection pipe with brass unions : | | | | |

| | | | | | | |
|----|-----------|--|------|----|--|--|
| a | 18.21.2.1 | 45 cm length 15 mm nominal bore | Each | 18 | | |
| 16 | 18.51.1 | Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.: 15 mm nominal bore: Make:Jauqar, Hindware, Parryware, crome | Each | 12 | | |
| 17 | 18.53.1 | 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: 15mm nominal bore: Make: Jauqar, Hindware, Parryware, crome | Each | 32 | | |
| 18 | 18.58.2.1 | Providing and fixing PTMT grating of approved quality and colour.:Rectangular type with openable circular lid.150 mm nominal size square 100 mm diameter of the inner hinged round grating | Each | 8 | | |
| 19 | 18.65 | Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements. Weighing not less than 106 gms. | Each | 14 | | |
| 20 | 18.76.1 | Cutting holes up to 30x30 cm in walls including making good the same: With common burnt clay F.P.S. (non modular) bricks. | Each | 10 | | |

| | | | | | | |
|----|-----------|---|-------|----|--|--|
| 21 | 18.77 | Cutting holes up to 15x15cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof. | Each | 10 | | |
| 22 | 12.41.2 | Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.(i) Single socketed pipes. 110 mm diameter | Metre | 30 | | |
| 23 | 12.42 | Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. | | | | |
| a | 12.42.1.2 | Coupler: 110 mm | Each | 6 | | |
| b | 12.42.3.2 | Single tee with door: 110x110x110 mm | Each | 2 | | |

| | | | | | | |
|----|---------------|---|------|------|--|--|
| c | 12.42. 5.2 | Bend :110 mm | Each | 12 | | |
| d | 12.42. 6.2 | 110 mm Shoe | Each | 3 | | |
| 24 | 12.44 | Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams. | Each | 3.00 | | |
| 25 | 12.43. 2 | Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised -PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete. 110 mm | Each | 30 | | |
| 26 | 19.4 | 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 | | | | |
| a | 19.4.3 .1 | 180x150 mm size P type With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | Each | 3 | | |

| | | | | | | |
|----|--------------|---|------|---|--|--|
| 27 | 19.7 | 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 : | | | | |
| a | 19.7.1 .1 | 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 | | |
| b | 19.7.3 .1 | Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | Each | 1 | | |

| | | | | | | |
|----|--------------|--|-------|---|--|--|
| 28 | 19.8 | Extra for depth for manholes | | | | |
| a | 19.8.1 .1 | Size 90x80 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | Metre | 1 | | |
| b | 19.8.2 .1 | Size 120x90 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | Metre | 2 | | |
| 29 | 19.16 | Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design. | Each | 6 | | |

| | | | | | | |
|----|------|---|------|-------|--|--|
| 30 | MR | Providing & fixing of CP Health faucet. Hand operated spray unit (instand type) . Make: Jauqar, Hindware, Parryware, crome., (Lowest retail price not less than 1200/each. Materials to be selected by the Engineer in charge) | Set | 8 | | |
| 31 | M.R. | Providing and fixing PVC pipe for soil, waste and vent pipe with IS standard quality, including all fittings, like EG : Bends, Tees, Elbows, Collars, junction, inspection doors, cowls, offsets, access pipes, jointing with rubber ring/ solvent cement by application of leak proof adhesive like FRP paste including cutting holes in walls and floors and making good. Make: Supreme, Finolex, Prince | | | | |
| a) | MR | 50mm dia (6kg / sq.cm) | Mtr. | 15.00 | | |
| b) | M.R. | 63mm dia (6kg / sq.cm) | Mtr. | 20.00 | | |
| c) | M.R. | 75mm dia (6kg / sq.cm) | Mtr. | 25.00 | | |
| e) | M.R. | 110mm dia (6 kg / sq.cm) | Mtr. | 25.00 | | |
| f) | M.R. | 160mm dia (6 kg / sq.cm) | Mtr. | 50.00 | | |

| | | | | | | |
|----|------------|---|-------|------|--|--|
| 32 | M.R. | Providing and fixing PVC floor trap self cleansing design with or without vent arm complete including cutting and making good the walls and floors. Make Supreme,Finolex,Prince etc.,110mm dia inlet 110mm dia outlet | Each | 8 | | |
| 33 | LMR | Supply, erection and commissioning of 1HP Centrifugal pump for a discharge of 167 litres/ minute with a total head of 45m including cost of panel board, valves, pressure gauge, specials and fittings etc. complete | LS | 1 | | |
| 34 | 18.48 A | Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank. | litre | 2000 | | |
| | | Total amount | | | | |

Lift PART C

| Sl No | Description | Unit | Qty | Rate in words and figures | Amount in words and figures |
|--------------|---|-------------|------------|----------------------------------|------------------------------------|
| | SITC of Goods lift of 2000 kg capacity suitable for operation on 415 V, 3 phase, 50 Hz AC supply, having AC variable voltage and variable frequency type traction control, speed of 0.50 Mtr/sec, electromagnetic brake system, simple operations, operating control panel with buttons, overload warning indicator, battery operated alarm bell, reverse phase relay on controller, digital car positions indicator on wall at all floors with Up/DOWN direction, all signal fixtures in stainless steel faceplates, light fixtures, etc complete with all accessories. The equipment traction motor placed in the Machine Room, geared type with travel height of 8.mtrs. (suitable for well size 2800mm (W)X 3000m(D) simplex operation. | | | | |
| | Equipment entrance protected by Stainles Steel hairline finish and center / side opening with minimum opening size of 1200 M X 2000M. Complete with necessary scaffolding, electrical panel, logic control panel and shaft lighting etc required for the erection of the Lift. Capacity Minimum 2000 Kgs,2 stops & 2 openings with suitable car size.Inside dimensions and entrance at front side on all the serving floors, provided with Stainles Steel hairline finish car on other three sides and ceiling, Aluminium chequered plate flooring complete as per specifications. | No | 1 | | |
| | Total | | | | |

Electrical PART D

| SI No | | Description | Unit | Qty | Rate in words and figures | Amount in words and figures |
|---------------------|--------|--|-------|-----|---------------------------|-----------------------------|
| A. LT Wiring | | | | | | |
| 1 | 1.10.3 | Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. | Point | 140 | | |
| 2 | 1.11 | Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. | Point | 2 | | |
| 3 | | Wiring for circuit/submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required. | | | | |
| 3.1 | 1.14.1 | 2 x 1.5 sq.mm + 1 x 1.5 sq.mm earth wire | m | 700 | | |

| | | | | | | |
|-----|---------|---|------|-----|--|--|
| 3.2 | 1.14.2 | 2 x 2.5 sq.mm + 1 x 2.5 sq mm earth wire | m | 900 | | |
| 3.3 | 1.14.3 | 2 x 4.0 sq.mm + 1 x 4.0 sq mm earth wire | m | 500 | | |
| 4 | 1.18.2 | 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 | 250 | | |
| 5 | | 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. | | | | |
| 5.1 | 1.21.1 | 20 mm | m | 250 | | |
| 5.2 | 1.21.2 | 25 mm | m | 300 | | |
| 5.3 | 1.21.3 | 32 mm | m | 100 | | |
| 6 | 1.22.12 | Supplying and fixing metal box of 200 x 250 x 100 mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required. | Each | 5 | | |

| | | | | | | |
|----|--------|--|------|-----|--|--|
| 7 | 1.24.6 | Supplying and fixing modular typr Telephone socket outlet on the existing modular plate & switch box including connections but excluding modular plate etc. as required. | Each | 30 | | |
| 8 | 1.25 | Supplying and fixing two module stepped type electronic fan regulator-modular on the existing modular plate switch box including connections but excluding modular plate etc. as required. | Each | 30 | | |
| 9 | 1.26 | Supply and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required. | Each | 50 | | |
| 10 | 1.27.1 | Supplying and fixing 1 or 2 modules, PVC / GI box alongwith modular base & cover plate for modular switches in recess / surface etc as required. | Each | 60 | | |
| 11 | 1.31 | Supplying and fixing suitable size GI / 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 | 45 | | |
| 12 | 1.32 | Supplying and fixing suitable size GI / 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 | 30 | | |
| 13 | 1.33 | Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required. | Each | 160 | | |

| | | | | | | |
|----|--------|--|------|----|--|--|
| 14 | 1.41 | Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube / lamp etc. directly on ceiling/ wall including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required. | Each | 15 | | |
| 15 | 1.42 | Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube / lamp etc. including supplying and fixing ball & socket arrangement, 2 nos down rods of 20mm dia x 1.6mm thick steel conduit upto 30cm length, painting & wiring the down rods and connections with 1.5sqmm FRLS PVC insulataed, copper conductor, single core cable and earthing etc as required. | Each | 45 | | |
| 16 | 1.44 | Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required. | Each | 30 | | |
| 17 | 1.50.1 | Installation of exhaust fan upto 450mm sweep in the existing opening, including making good the damage, connection, testing, commissioning etc. as required. | Each | 10 | | |

| | | | | | | |
|-------------------------------------|--------|--|-------|-----|--|--|
| 18 | 1.53.1 | Supplying and drawing of UTP 4 pair CAT 6 LAN cable in the existing surface / recessed steel / PVC conduit as required. | m | 250 | | |
| 19 | 1.55.3 | Wiring for group controlled (looped) light point / fan point / exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. | Point | 20 | | |
| 20 | 1.56 | Supplying and fixing suitable size GI / PVC box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos 3 pin 5/6 amps modular socket outlet and 2nos 5/6 amps modular switch, connection etc. as required. | Each | 10 | | |
| 21 | 1.58 | Supplying and fixing PVC batten/ angle holder including connections etc. as required. | Each | 10 | | |
| B. MCBs, DBs and Cable Trays | | | | | | |
| 1 | | Providing and fixing 100A, 16kA, TP MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board / DB including drilling holes in cuicle panel, making connection etc as required. | Each | 1 | | |
| 2 | | Supplying and fixing 12 way, Double door, single pole and neutral, sheet steel, MCB distribution board, 240 volts on surface / recess complete with | Each | 1 | | |

| | | | | | | |
|-----|--------|--|------|----|--|--|
| | | tinned copper busbar, neutral busbar, earth bar, din bar, interconnections, powder painted including earthing etc as required (But without MCB / RCCB / Isolator). | | | | |
| 3 | | Supplying and fixing following way horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts on surface / recess complete with tinned copper busbar, neutral busbar, earth bar, din bar, interconnections, powder painted including earthing etc as required (But without MCB/RCCB/Isolator). | | | | |
| 3.1 | 2.4.1 | 4 way double door | Each | 1 | | |
| 3.2 | 2.4.2 | 6 way double door | Each | 2 | | |
| 4 | | Supplying and fixing 5 amps to 32 amps rating, 240 / 415 volts, 10kA, "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. | | | | |
| 4.1 | 2.10.1 | Single pole | Each | 30 | | |
| 4.2 | 2.10.4 | Triple pole | Each | 2 | | |
| 4.3 | 2.10.5 | Triple pole and neutral | Each | 2 | | |

| | | | | | | |
|-----|--------|--|------|----|--|--|
| 5 | 2.11 | Supplying and fixing single pole blanking plate in the existing MCB DB complete etc as required. | Each | 20 | | |
| 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 | 2.12.1 | 40 amps | Each | 1 | | |
| 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. | | | | |
| 7.1 | 2.13.1 | 40 amps | Each | 2 | | |
| 7.2 | 2.13.2 | 63 amps | Each | 2 | | |
| 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. | | | | |
| 8.2 | 2.14.2 | 40 amps | Each | 1 | | |

| | | | | | | |
|--------------------|--------|---|------|----|--|--|
| 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. | | | | |
| 9.2 | 2.15.2 | 40 amps | Each | 2 | | |
| 10 | 2.16 | Supply and fixing DP sheet steel enclosure on surface recess along with 16 / 25 / 32 amps 240V "C" curve DP MCB complete with connections, testing and commissioning etc as required. | Each | 1 | | |
| 11 | 2.17 | 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 | 2 | | |
| 12 | 2.18 | 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 | 12 | | |
| C. Earthing | | | | | | |

| | | | | | | |
|---|-------|--|------|-----|--|--|
| 1 | 5.6 | Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke as required. | Each | 2 | | |
| 2 | 5.13 | Providing & laying earth connection from earth electrode with 4mm dia copper wire in 15mm dia GI pipe from earth electrode including connection with copper thimble excavation and re-filling as required. | m | 80 | | |
| 3 | 5.14 | Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required. | m | 150 | | |
| 4 | 5.17 | Providing and fixing 4 mm dia copper wire on surface or in recess for loop earthing along with existing surface / recessed conduit / sub-main wiring / cable as required. | m | 200 | | |
| D. MV Cable laying and Termination | | | | | | |
| 1 | | Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1kV grade of following size in the existing RCC / HUME / METAL pipe as required. | | | | |
| | | Upto 35 sqmm | | | | |
| 1.1 | 7.5.1 | | m | 40 | | |
| 2 | | 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. | | | | |

| | | | | | | |
|-----|--------|---|------|-----|--|--|
| 2.1 | 7.6.1 | Upto 35 sq. mm | m | 20 | | |
| 3 | | Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required. | | | | |
| 3.1 | 7.7.1 | Upto 35 sq. mm (clamped with 1mm thick saddle) | m | 50 | | |
| 3.2 | 7.7.2 | Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp) | m | 10 | | |
| 4 | | 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. | | | | |
| 4.1 | 7.8.1 | Upto 35 sq. mm (clamped with 1mm thick saddle) | m | 290 | | |
| 4.2 | 7.8.2 | Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp) | m | 50 | | |
| 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 | 9.1.22 | 3.5 x 50 sqmm | Each | 2 | | |
| 5.2 | 9.1.21 | 3.5 x 35 sqmm | Each | 2 | | |

| | | | | | | |
|---------------------------------------|---------|---|------|------|--|--|
| 5.3 | 9.1.20 | 3.5 x 25 sqmm | Each | 6 | | |
| 5.4 | 9.1.33 | 4 x 16 sqmm | Each | 8 | | |
| 5.5 | 9.1.32 | 4 x 10 sqmm | Each | 4 | | |
| 5.6 | 9.1.32 | 4 x 6 sqmm | Each | 4 | | |
| 6 | 14.14.2 | Providing, laying and fixing of 100 mm dia GI pipe (medium class) in ground / on surface complete with GI fittings including trenching (75 cm deep) and refilling, clamping using suitable size MS clamp etc as required. | m | 30 | | |
| 7 | 10.25.2 | Supply and installation of structural steel work with required size MS angle, MS flat etc for cable tray work including cutting, hoisting, welding, bolting, fixing in position, hanging, and applying 2 coat of steel primer and 2 coat of enamel paint of approved quality all complete. The GA drawing and fixing arrangement shall be got approved from the Engineer-in-charge. | kg | 1000 | | |
| <u>LMR</u> | | | | | | |
| <u>Item</u> | | | | | | |
| E. LT Cables & Termination | | | | | | |

| | | | | | | |
|-----|--|---|---|-----|--|--|
| 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 | 60 | | |
| 1.2 | | 3.5 x 35 sqmm cable | m | 60 | | |
| 1.3 | | 3.5 x 25 sqmm cable | m | 120 | | |
| 1.4 | | 4 x 16 sqmm cable | m | 130 | | |
| 1.5 | | 4 x 10 sqmm cable | m | 50 | | |
| 1.6 | | 4 x 6 sqmm cable | m | 40 | | |
| 2 | | Supply of the 2Cx10 sqmm 1.1kV grade XLPE insulated PVC sheathed, un-armoured copper conductor power cable confirming to IS 7098 (part 1) ammended upto date. | m | 30 | | |

| | | | | | | |
|--------------------------|--|---|------|----|--|--|
| 3 | | Supplying and making cable end termination with brass straitening unarmoured cable gland or Nylon (Polyamide) cable gland and copper lugs for 2Cx10 sqmm PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. | Nos | 4 | | |
| F. Light Fixtures | | | | | | |
| 1 | | Supply of 1x28W sleek box channel type Industrial luminaire, with epoxy powder coated CRCA housing, reflector & decorative end caps etc complete with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamp etc complete as required. (Crompton T5RSF28EB / Philips TMS122M 1 xTL5 28W EBT / Wipro WIF 30128 SG). | Each | 30 | | |
| 2 | | Supply of 2x28W sleek box channel type Industrial luminaire, with epoxy powder coated CRCA housing, reflector & decorative end caps etc complete with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamp etc complete as required. (Crompton T5RSF228EB / Philips TMS122M 2 xTL5 28W EBT / Wipro WIF 30228 SG). | Each | 30 | | |

| | | | | | | |
|---|--|--|------|----|--|--|
| 3 | | Supply and installation of 7-10 W LED luminaire with aluminium extruded channel finished in anodised with plastic end cap , high translucent PMMA diffuser etc with all electrical accessories like high efficiency electronic driver, lamps etc complete as required. (Crompton LCL-07-CDL / Wipro LL20-111-XXX-65-NE / Equi) | Each | 10 | | |
| 4 | | Supply and installation of 14-18 W LED luminaire with aluminium extruded channel finished in anodised with plastic end cap , high translucent PMMA diffuser etc with all electrical accessories like high efficiency electronic driver, lamps etc complete as required. (Crompton LCL-14-CDL / Wipro LL20-221-XXX-65-NE / Equi) | Each | 15 | | |
| 5 | | Supply and installation of 21-25 W LED street light luminaire with sleek pressure dia cast aluminium housing, heat resistant glass, IP65 protection with all electrical accessories like electronic driver, lamps etc complete as required. The light fitting shall be installed with suitable dia x 2m long GI pipe (medium class) bracket for mounting LED light fitting on building including bending the pipe to the required shape, 2 nos of required size flat iron clamps (duly painted with primer & finish paint) with nuts, bolts and washer etc as required. (Crompton LSTP-25-CDL / Philips BRP022 LED 21CW MR S1 PSU GR / Wipro LR02-291-XXX-57-XX) | Each | 5 | | |

| | | | | | | |
|------------------------|--|---|------|----|--|--|
| 6 | | Supply of ceiling fan 1200mm sweep, double ball bearing, approved colour and quality with original down rod,suspension shackle,canopy etc with out regulator complete with all accessories as required. (Usha Technix Decorative (5 star rating) / Crompton High Breeze plus (5 star) / Orient Energy star) | Each | 30 | | |
| 7 | | Supply & installation of 400mm sweep, Wall fan with metal body, powder coated guard, metal blade etc suitable for single phase 230 volt, 50Hz AC supply complete with motor, capacitor and all accessories as required complete. (Crompton WMSDX 120 / Usha Max Air white / Equi) | Each | 20 | | |
| 8 | | Supply of heavy duty exhaust fan 450 mm sweep, single phase, 900 rpm of approved colour including all accessories as required (Crompton EXHD450-6-1 / Usha Turbo heavy duty / Havells Turbo Force) | Each | 4 | | |
| 9 | | Supply of exhaust fan (metal type) 300 mm sweep of approved colour for single phase 230 volt, 50Hz AC supply complete with motor, capacitor, metal bird screen and all accessories as required complete. (Crompton Trans Air 12" / Havells Ventilair DB / Equi) | Each | 10 | | |
| G. UPS and MCBs | | | | | | |

| | | | | | | |
|---|--|--|------|---|--|--|
| 1 | | Supply, installation, testing & commissioning of 6 kVA, 1 phase input, 1 phase output, double conversion true on-line UPS system with 30 minutes back up (full load), including all accessories, SMF batteries VRLA type with powder coated MS cabinet, battery cabling including all accessories as required complete having following specification. | | | | |
| | | Fully digital controlled based on DSP (IGBT based) | | | | |
| | | Power factor corrected from end > 0.9 | | | | |
| | | Pure sine wave output. | | | | |
| | | Full time output voltage & frequency regulation | | | | |
| | | Auto regulation of battery end voltage | | | | |
| | | Intelligent interface with LED/LCD display | | | | |
| | | Static bypass switch & manual by pass switch | | | | |
| | | Auto temperature compensation | Nos | 1 | | |
| 2 | | Supplying and fixing 40A/63A, TP, MCB, 415 Volts, "C" series, miniature circuit breaker in the existing MCB DB complete with connections, testing and commissioning etc as required. | Each | 2 | | |
| 3 | | Supplying and fixing 40A/63A, DP, MCB, 415 Volts, "C" series, miniature circuit breaker in the existing MCB DB complete with connections, testing and commissioning etc as required. | Each | 1 | | |

| | | | | | | |
|----------------------------|--|--|------|-----|--|--|
| 4 | | Supply and fixing DP sheet steel enclosure on surface recess along with 40 / 63 amps 240V "C" curve DP MCB complete with connections, testing and commissioning etc as required. | Each | 1 | | |
| 5 | | Supplying and fixing 8 way surface / recess mounted vertical type, 415 volts, TPN MCCB 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 MCCB as incomer, interconnection between incomer MCCB and busbar (but without MCBs / MCCB) as required. (Note vertical type MCCB DB is normally used where 3 phase outlets are required). | Each | 1 | | |
| H. Telephone system | | | | | | |
| 1 | | Supply and laying 20 pair 0.5 sqmm solid annealed Bare copper Industrial Telephone cable with high density polyethylene insulation, polyester and sheathed with high oxygen index, FR, PVC compound, generally conforming to ITD specification. The cable shall be laid in surface / through pipe / in cable tray etc including all accessories as required. | m | 150 | | |

| | | | | | | |
|--------------------------|--|--|------|-----|--|--|
| 2 | | Supply and laying 10 pair 0.5 sqmm solid annealed Bare copper Industrial Telephone cable with high density polyethylene insulation, polyester and sheathed with high oxygen index, FR, PVC compound, generally conforming to ITD specification. The cable shall be laid in surface / through pipe / in cable tray etc including all accessories as required. | m | 100 | | |
| 3 | | Supply and Installation of 20 pair MDF box, back mount frame and original krone connectors etc with all required accessories. | Each | 1 | | |
| 4 | | Supply and Installation of 10 pair MDF box, back mount frame and original krone connectors etc with all required accessories. | Each | 1 | | |
| I. Network system | | | | | | |
| 1 | | Supply & fixing modular type computer outlet (RJ-45) with modular base and cover plate, GI / PVC box complete with all accessories, connection etc. complete as required. | Each | 25 | | |
| 2 | | Supply and installation of 24 port fully loaded patch panel, with cable manager, 24 nos RJ45 keystone jack, 24 nos 2 feet cat 6 patch cord etc with all required accessories complete as required. | nos | 1 | | |
| 3 | | Supply and installation of 9 U wall mounted Network Rack made of steel, powder coated, front glass cover with power distribution unit (PDU's), cable manager and cooling fans including all required accessories. | nos | 1 | | |

| J. Miscellaneous | | | | | |
|-----------------------------|--|---|-----|----|--|
| 1 | | Dismantling and refixing existing cable tray in another location after proper removal of cables, cable clamps, cable termination, earth strip etc. Necessary cutting, jointing, proper finishing, painting (with primer & 2 coats of same colour enamel paint), fixing using anchor fastner / grouting etc of the cable tray shall be part of the work. | m | 30 | |
| 2 | | Dismantling and refixing existing MCCB with enclosure upto 100A including its frame. The work also includes disconnecting & re-connecting cable termination, earth strip / SWG, fixing accessories etc as required. | nos | 5 | |
| 3 | | Laying and fixing of following size earth wire / strip on surface / cable tray for loop earthing including all required accessories along with existing cable as required. | | | |
| 3.1 | | Upto 25 x 6mm Cu strip | m | 60 | |
| 3.2 | | Upto 6 SWG Cu wire | m | 50 | |

| | | | | | | |
|---|--|--|-----|-----|--|--|
| 4 | | Providing and fixing extra conduit down rod of 15 / 20mm dia, including wiring with 1.5 sqmm FRLS PVC insulated copper conductor, single core cable including painting of pipe etc as required for the extension of down rod of light fitting & ceiling fan.. | m | 150 | | |
| 5 | | Preparation of electrical drawing, submission of drawings to Electrical inspectorate / KSEB, all necessary liasoning work and obtaining approval, arranging inspection for the installation, obtaining sanction orders for the energisation of the installation. Including all incidental expenses except the fees payable to the statutory authorities in the name of client. | Job | 1 | | |
| | | | | | | |
| | | TOTAL | | | | |
| | | Grant Total (PARTA+ PARTB+ PARTC+ PARTD) | | | | |

Price should be inclusive of all taxes and duties including GST.