

TENDER

FOR

***CIVIL & ELECTRICAL WORKS FOR WAREHOUSE OF
SANITARY NAPKIN PLANT AT
KANAGALA FACTORY OF HLL
AT
BELGAM, KARNATAKA***

**PART-III
PRICE BID**

**TENDER NO. HLL/ID / 13/65
September 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 **Civil & electrical works for Warehouse of Sanitary Napkin Plant at Kanagala Factory of HLL at Belgam, Karnataka.**

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.

1.6.2. Within the above frame work of the terms of payment the contract's interim bills will have to be of a minimum value of Rs.25.0 lakh only.

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.

LIST OF APPROVED MAKES - CIVIL

| Sl. No | Materials | Manufacturers / Agencies |
|--------|---|---|
| 1 | Ready mixed Concrete | UltraTech, RAMCO, ACC, Birla. Design mix vetted through government engineering college to be produced by vendor and got approved by engineer in charge. |
| 2 | Ordinary Portland Cement (Minimum 43 Grade) | UltraTech, RAMCO, Chettinad, IndiaCements, Birla (Grasim), ACC |
| 3 | Reinforcement/Structural Steel (Each LOT shall accompany manufacturer's Test Certificate) | SAIL, TISCO, RINL |
| 4 | White Cement | JK Cement, Birla White |
| 5 | Vitrified Tiles | Nitco, Johnson, Naveen, Euro, Somany, AGL, Johnson, Kajaria, Marbitto |
| 6 | Flush doors | Kutty Flush Doors, Mysore Boards, Indian Plywood Mfg, Co, 'KIT' Ply' brand or any BIS approved brand |
| 7 | Fire doors | Shakti Met-Dor, Godrej, Sukri, Pacific works controls |
| 8 | FRP Doors | Fibrevent, Techno skills or Equivalent (or as approved by E-in-C) |
| 9 | Aluminium Fittings | Everite, Garnish, Crown Classic |
| 10 | Hydraulic floor Spring | Everite, Garnish, Hardwyn, Dorma |
| 11 | Aluminium Extruded Sections | Jindal, Hindalco, Indalco |
| 12 | Aluminium Doors/Windows | As approved by E-in-C |
| 13 | Paints, Distempers | Jenson & Nicholson, Asian, ICI, Nerolac, Berger |
| 14 | Glazing | Float Glass of Modiguard or Saint-Gobain |
| 15 | Water proofing Works | As approved by E-in-C |
| 16 | Hydraulic Door Closers | Hardwyn, Everite, Garnish, Dorma |

| | | |
|----|--|--|
| 17 | Water Proofing Cement Paint | Showcem India, ICI, Nerolac |
| 18 | Ceramic Glazed Floor Tiles | Nitco, Orient, Kajaria, Somany, Naveen, AGL, Johnson |
| 19 | Cast Iron Pipe and Fittings (Soil Pipes) | BIC, HEP, NECO, Ajmera |
| 20 | GI Pipes (ISI marked) | TATA, Zenith, Jindal, Gujarat Steel, ITC |
| 21 | GI Fittings (ISI marked) | 'R' Brand, UNIK or equivalent |
| 22 | Gunmetal Valves & Fittings | Premier, Leader, Zoloto, or ISI marked brand |
| 23 | CP Brass Sanitary and water supply Fittings | Jaguar/Essess/SOMA/BILMAT/ Dripless or equivalent approved by E-In-C |
| 24 | Vitreous China Sanitary ware | Hindustan, EID Parryware, Cera |
| 25 | WC Seats & Covers | Commander, Diplomat, Admiral (or as approved by E-In-C) |
| 26 | CI Fixtures, CI Cover & Frame | Ashok Iron Works/Bombay Iron Works/A Husainji / Ismaelji, Neco, BIC, RIF |
| 27 | CPVC Pipes | Astral Polytechnik, Ashirvad, Ajay Industrial corp, Prince, Supreme |
| 28 | Curtain/Wall/Structural Glazing | Specialist Agency to be employed with Prior Approval of E-In-C |
| 29 | Plywood Products, Parcticle Boards & Veneers | Duroply (Green Marked, BWR Century Plywood, Green Plywood Kitply, Mysore Boards |
| 30 | Adhesive | Pidilite, Araldite |
| 31 | Plastic Laminates | Formica, Greenlam, Bakelite HYLAMylam |
| 32 | Powder Coatings | Berger/Nerocoat/Jenson & Nicholson |
| 33 | Tile Joint Filler | Bal Adhesives & Grouts,"ROFFE" Rainbow Tile Mate, Silicon Sealnet of GE Bayer Silicon/"Zentrival FM" of MC-Bauchemie (India) P Ltd |
| 34 | MS Tubes | TATA or equivalent |
| 35 | Roof Water Proofing | India Water Proofing, CICO, SIKA |

| | | |
|----|---|---|
| 36 | Silicon Sealant | GE Bayer Silicone, SIKA |
| 37 | Anchor Fastener | Hilti, Bosch |
| 38 | Formwork Release Agent | Fosroc, MBT, MC Baucheme CICO, ADO Conmat |
| 39 | EPOXY | FOSROC. SIKA Qualcrete, Aradlite MBT |
| 40 | Water proofing System | CICO, FOSROC, SIKA, Supreme Siltech Chemicals, ADO Conmat |
| 41 | Stainless Steel Sinks | Prestige/AMC/Jayna/Kingston/Neelkanth |
| 42 | CP Waste, Spreaders for Urinals | Jaguar / Essess |
| 43 | Sensor based Auto Flushing System for Urinals | AOS Systems/Angash |
| 44 | SFRC Manhole Covers | Southern Concrete Industries, Rajvaibav Enterprises or equivalent |
| 45 | UPVC Pipes/Fittings | Supreme/Prince/ Finolex |
| 46 | Mirror | Atul/Modifloat/Saint Gobain/Golden Fish/AIS |

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS

| S. No. | MATERIALS | PREFERED MAKE |
|---------------|--|--|
| 1 | LT UG cables | Gloster / Torrent / Havells / Polycab |
| 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 | Kappa / Intrans / Resitech / PGR Powertech |
| 7 | Measuring Instruments | AE / Conserv / Rishab / Schneider / L&T |
| 8 | Starters /Contractor /Bi metal Relay | L&T / Siemens / Schneider / GE / Beluk |
| 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 / Lapp Kabel |
| 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 | Cable tray | Profab / Patny / Indiana / Elcon |
| 20 | Lamps | Philips / Wipro / GE / Osram |
| 21 | Capacitor | Universal / Mehar / L&T / Siemens |
| | | |

BILL OF QUANTITIES

ABSTRACT

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

CIVIL WORKS

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|-------|----------|-------------------------------------|---------------------------------------|
| 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 | cum | 275.00 | | |
| 2.a | Excavating trenches of required width for pipes, cables etc including excavation for sockets and dressing of sides, ramming of bottoms, depth upto 1.5m including getting out the excavated soil and then returning the soil as req in layers not exceeding 20cm in depth including consolidating each deposited layer by ramming, watering etc and disposing of surplus excavated soil as directed, within the lead of 1km. All kinds of soil - pipe, cables not exceeding 80mm dia. | metre | 50.00 | | |
| 2.b | Pipe, cables exceeding 80mm dia but not exceeding 300mm dia | metre | 150.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|---------|----------|-------------------------------------|---------------------------------------|
| 3 | Filling available earth (excluding rock) in trenches plinth, sides of foundations, plinth etc. in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering, lead up to 1km and lift upto 1.5 m | cum | 1,120.00 | | |
| 4 | Supplying and stacking - Good earth | cum | 1,000.00 | | |
| 5 | 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 removal of rubbish upto a distance of 1km outside the periphery of the area cleared. | 100 sqm | 660.00 | | |
| 6 | Supplying chemical emulsion In sealed containers including delivery as specified. Chlorpyriphos/ Lindane emulsifiable concentrate 20% | Litre | 20.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|-------|----------|-------------------------------------|---------------------------------------|
| 7 | Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion): Along the external wall below concrete or masonry apron using chemical emulsion at 2.25 lts per linear metre incl drilling & plugging holes etc. Chloropyriphos/ Lindane emulsifiable concentrate 20% with 1% concentration | metre | 150.00 | | |
| 8 | 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 | 35.00 | | |
| 9 | 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size). | cum | 140.00 | | |
| 10 | Vacuum de-watering the RCC floor when the concrete is in wet condition in areas specified at all elevation, heights and levels by the Tremix method, including machine trowelling etc., complete | sqm | 1,400.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|----------|----------|-------------------------------------|---------------------------------------|
| 11 | Groove Cutting 3mmx15mm With Polysulphite Filling | rm | 200.00 | | |
| 12 | Providing and laying in position machine batched and machine mixed design mix M-30 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, All works upto plinth level. Providing M-30 grade concrete (Note:- Cement content considered in M-30 is @ 400kg/cum) Foundations, footings, bases of columns, slabs (Septic, ugt, lift pit slab) etc. for mass concrete. Fixing of bolts to the column base. (Bolts provided by the PEB vendor) | cum | 220.00 | | |
| 13 | Add for using extra cement in the items of design mix over and above the specified cement content therein. | Quin tal | 25.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 14 | 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 | 4.50 | | |
| 15 | Centering and shuttering including strutting, propping etc. and removal of form for Foundations, footings, bases of columns, etc. for mass concrete | sqm | 370.00 | | |
| 16 | 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 bed of dry brick ballast 40 mm nominal size well rammed and considered and grouted with fine sand including finishing the top smooth. | sqm | 110.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 17 | Providing and laying DPC 40mm thk with concrete 1:2:4 (1 cement :2 coarse sand :4 graded stone aggregate 12.5mm nominal size) | sqm | 50.00 | | |
| 18 | Reinforcement for RCC work including straighting, cutting, bending, placing in position and binding all complete. Thermo Mechanically treated bars (assuming 140kg/cum) | kg | 22,500.0 | | |
| 19 | 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 | 35.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|----------|-------------------------------------|---------------------------------------|
| 20 | 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 1:4 (1 cement : 4 coarse sand) | cum | 100.00 | | |
| 21 | Half brick masonry 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. Cement mortar 1:4 (1 cement :4 coarse sand) | sqm | 40.00 | | |
| 22 | Structural Steel work riveted, bolted or welded in built up sections, trusses & framed work including cutting hoisting fixing in position & applying priming coat of approved steel primer all complete. | kg | 160.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|----------|--|------|----------|-------------------------------------|---------------------------------------|
| 23 | Steel work in built up tubular (GI pipe 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. | kg | 4,220.00 | | |
| 24 | Providing and fixing expanded metal 20x60 mm strands 3.25 mm wide and 1.6 mm thick for windows etc. including 62 x19 mm beading of II nd class teak wood and priming coat with approved steel primer all complete. | sqm | 40.00 | | |
| 25. a | 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. | sqm | 115.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|----------|--|-----------|----------|-------------------------------------|---------------------------------------|
| 25. b | Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, 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 using self drilling/ self tapping screws complete : Gutter .(600 mm over all girth) | met er | 20.00 | | |
| 26 | Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50mm including strengthening with 2mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.Made of G.I. wire of dia. 4mm, PVC coated to achieve outer dia. not less than 5mm in required colour and shade. | sqm | 30.00 | | |
| 27. a | 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. - 80x1.25 mm MS laths with with 1.25mm thick top cover | sqm | 36.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|----------|--|------|----------|-------------------------------------|---------------------------------------|
| 27. b | Providing and fixing ball bearing for rolling shutter | Nos | 4.00 | | |
| 27. c | Extra for providing mechanical device chain and crank operation for operating rolling shutters. Exceeding 16.80 sqm in area | sqm | 36.00 | | |
| 28 | Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge. | cum | 110.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 29 | Providing and laying Ceramic glazed floor tiles 300 x 300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 13755 of Euro, NITCO, ORIENT, KAJARIA, SOMANY or equivalent make in all colours, shades except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete. (In Toilet Area) | sqm | 25.00 | | |
| 30 | Providing and 1st quality 200mm x 300mm ceramic glazed wall tiles conforming to IS : 13753 of minimum thickness 5 mm of approved make like Euro, NITCO, ORIENT, SOMANY, KAJARIA, or quivalent make in all colours, shades except begundy, 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 @ 3.3 kg per sqm including pointing in white cement mixed with pigment of matching shade complete. (TOILET AREA) | sqm | 9.00 | | |
| 31 | Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in Charge. | Sqm | 620.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 32 | Laying old cement concrete interlocking paver blocks of any design/shape laid in required line, level, curvature, colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost). | Sqm | 430.00 | | |
| 33 | Providing and laying Ceramic glazed floor tiles 300 x 300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of Euro, NITCO, ORIENT, KAJARIA, SOMANY or equivalent make in all colours, shades except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete. (In Toilet Area) | Sqm | 20.00 | | |
| 34 | 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. (In Toilet Area) | sqm | 13.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|----------|-------------------------------------|---------------------------------------|
| 35 | 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 | 330.00 | | |
| 36 | 12 mm cement plaster finished with a floating coat of neat cement of mix : 1:4 (1 cement: 4 fine sand) | sqm | 310.00 | | |
| 37 | 6 mm cement plaster of mix :1:3 (1 cement: 3 fine sand) for ceiling | sqm | 25.00 | | |
| 38 | Finishing walls with Premium Acrylic Smooth exterior paint with silicone additives "Snowcryn-XT of Snow cem apex, Exclusive or equivalent of required shade New work (2 or more coats applied at 1.43 ltr/10 sq m over & incl base coat of water proofing cement paint Eq applied at 2.2 kg / 10 sqm) | sqm | 330.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 39 | Distemping with 1 st quality acrylic washable distemper (ready made) of approved manufacture and of required shade and colour complete as per manufacture's specification. 2 or more coats on new work including a primer coat of cement primer | sqm | 335.00 | | |
| 40 | Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications : Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture | sqm | 30.00 | | |
| 41 | Painting with synthetic enamel paint of approved brand and manufacture to give and even shade. Two or more coats on new work | sqm | 60.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 42 | Providing and fixing Indian type water closet squatting pan of approved colour and shape-Orissa Pan (ECO) of Hindware (Cat No- 20042 size 58 x 44 cms) or equivalent with 100mm PVC P or S trap, 6 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) with all fittings and fixtures complete including cutting and making good the walls and floors wherever required. | Each | 2.00 | | |
| 43 | P/F vitreous china pedestal type water closet (european type) of approved colour and shape of HINDWARE- VISTA series (CAT no- 20041, size 675 x 460) or Equivalent with seat and lid, 10 litre low level dual flushing cistern and CP flush bend with fittings & CI brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of the approved municipal design complete including painting of fittings and brackets, cutting & making good the walls and floors wherever required: | Each | 2.00 | | |
| 44 | Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require : White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps. | Each | 2.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|-------|----------|-------------------------------------|---------------------------------------|
| 45 | Providing and fixing P.V.C waste pipe for sink or wash basin, including P.V.C waste fittings complete :-Flexible pipe :-32 mm dia. | Each | 2.00 | | |
| 46 | Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :100mm inlet 75mm outlet, Sand cast iron S&S as per IS - 3989 each 838.85 | Each | 5.00 | | |
| 47 | Providing and fixing unplasticised Rigid PVC 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. (a) 75 mm diameter | Metre | 4.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|-------|----------|-------------------------------------|---------------------------------------|
| | (b) 110 mm diameter | Metre | 10.00 | | |
| 48 | 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 | 5.00 | | |
| 49 | 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 | 1.00 | | |
| 50 | 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 | 1.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|--------------|--|-------------|-----------------|--|--|
| 51 | 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 | 2.00 | | |
| 52 | 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 | 1.00 | | |
| 53 | Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete. | Each | 2.00 | | |
| 54 | P/F unplasticised PVC connection pipe with brass union 45 cm length, 15 mm nominal bore | Each | 5.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|-------|----------|-------------------------------------|---------------------------------------|
| 55 | 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 | metre | 10.00 | | |
| 56. a | 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) - 32mm nominal outer dia pipes | metre | 20.00 | | |
| 56. b | 40mm nominal outer dia pipes | metre | 40.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|----------|--|------|----------|-------------------------------------|---------------------------------------|
| 57. a | Providing and fixing gun metal Gate valve with CI wheel of approved quality (screwed end)- 25mm dia nominal bore | Each | 4.00 | | |
| 57. b | 32mm dia.nominal bore | Each | 1.00 | | |
| 57. c | 40mm dia.nominal bore | Each | 1.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|----------|---|-------|----------|-------------------------------------|---------------------------------------|
| 58. a | P/f ball valve brass of approved quality for high or low pressure with plastic floats etc. complete. - 20mm dia | Each | 1.00 | | |
| 58. b | 25mm dia | Each | 1.00 | | |
| 59 | Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia. | Metre | 60.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|----------|--|------|----------|-------------------------------------|---------------------------------------|
| 60. a | Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. - 100 mm, Sand cast iron S&S as per IS - 1729 | Each | 5.00 | | |
| 60. b | For 75 mm dia. Pipe | Each | 5.00 | | |
| 61. a | Providing and fixing plain bend of required degree. Sand cast iron S&S as per IS - 1729- 100 mm | Each | 5.00 | | |
| 61. b | 75 mm | Each | 5.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|----------|--|------|----------|-------------------------------------|---------------------------------------|
| 62. a | Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. - 100x100x100 mm | Each | 5.00 | | |
| 62. b | 75x75x75 mm | Each | 5.00 | | |
| 63 | Providing and fixing square-mouth S.W. gully trap SP-1 complete with C.I Grating brick masonry chamber with water tight C.I.cover with frame of 300 x 300 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: 100 x 100 mm size P type With F.P.S. bricks class designation 75. | Each | 5.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|-------|----------|-------------------------------------|---------------------------------------|
| 64 | Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), 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 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished etc. complete as per standard design : | Each | 12.00 | | |
| 65 | Extra for depth beyond 45 cm of brick masonry chamber : For 455x610 mm size With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | metre | 60.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|-----------|----------|-------------------------------------|---------------------------------------|
| 66 | Constructing brick masonry manhole in cement mortar 1:4 (1cement:4 coarse sand) R.C.C. top slab with 1:2:4 mix (1 cement :2 coarse sand :4 graded stone aggregate 20mm nominale size) foundation concrete 1:4:8 mix (1 cement :4 ciales sand :8 graded stone aggregate 40mm nominale size) inside plastering 12mm thick with cement 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 standered design. (a)Inside dimensions 900x800mm 45 cms deep for pipe line with 1 or 2 inlets with FPS bricks of 45 kg /cm ² including C.I. cover with frame (light duty) 455x 610mm internal dimension total amount of cover and frame to be not less than 38kg (with of cover 23kg and at of frame 15 bg) With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | Each | 2.00 | | |
| 67 | Extra for depth for manholes:Size 90x80 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | Metr e | 2.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 68 | Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete : For pipes 100 to 230 mm diameter | Each | 2.00 | | |
| 69 | 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 | | |
| 70 | 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, rustfree, straight, mitred and jointed mechanically wherever Powder coated aluminium (minimum thickness of powder coating 50 micron) 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) : | kg | 20.50 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|-------|----------|-------------------------------------|---------------------------------------|
| 71 | 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 | 20.50 | | |
| 72 | 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 | 20.50 | | |
| 73 | P/F of Fibre Glass Reinforced Plastic (FRP) door frames of three legged of cross section 90mmX 45mm having single rebate of 32mm X 15 mm to receive shutter of 30 mm thickness. The laminate doorframe molded with fire resistant grade unsaturated polyester resin and chopped mat. Doorframe laminate shall be 2mm thk and shall be filled with suitable wooden block in all three legs. The frame shall be covered with fibreglass from all sides. M.S stay shall be provided to steady the frame. | metre | 20.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 74 | 30 mm thk Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture, made with fire-retardant grade unsaturated polyester resin, moulded to 3mm thk FRP laminate for forming hollow rails and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5mm thk FRP laminate for panels and conforming to IS: 14856-2000 including fixing to frames | Sqm | 6.50 | | |
| 75 | 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 | 90.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|----------|-------------------------------------|---------------------------------------|
| 76 | <p>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.</p> | sqm | 40.00 | | |
| 77 | <p>Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:</p> | sqm | 80.00 | | |

| SL No | DESCRIPTION | UNIT | QUANTITY | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|-------|----------|-------------------------------------|---------------------------------------|
| 78 | Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer in-charge: Up to 150 mm diameter | metre | 100.00 | | |
| | | | | Total | |

ELECTRICAL WORKS

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|--------------|--|-------------|------------|--|--|
| 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 | 310 | | |
| 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 | 4 | | |
| 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. | | | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|-----|-------------------------------------|---------------------------------------|
| 3.1 | 2 x 1.5 sq.mm + 1 x 1.5 sq.mm earth wire | m | 450 | | |
| 3.2 | 2 x 2.5 sq.mm + 1 x 2.5 sq mm earth wire | m | 680 | | |
| 3.3 | 2 x 4.0 sq.mm + 1 x 4.0 sq mm earth wire | m | 370 | | |
| 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. | | | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|-----|-------------------------------------|---------------------------------------|
| 4.1 | 20 mm | m | 100 | | |
| 4.2 | 25 mm | m | 125 | | |
| 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 | 140 | | |
| 6 | Supplying and fixing Telephone socket outlet on the existing modular plate & switch box including connections but excluding modular plate etc. as required. | Each | 5 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|-----|-------------------------------------|---------------------------------------|
| 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 | 20 | | |
| 8 | Supply and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required. | Each | 50 | | |
| 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 | 5 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|-----|-------------------------------------|---------------------------------------|
| 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 | 30 | | |
| 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 | 15 | | |
| 12 | Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required. | Each | 30 | | |
| 13 | Supplying and fixing brass batten/ angle holder including connection etc. as required. | Each | 10 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|-----|-------------------------------------|---------------------------------------|
| 14 | 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 | 250 | | |
| 15 | 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 | 20 | | |
| 16 | Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required. | | | | |
| 16.1 | Upto 450 mm sweep | Each | 20 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|---------------------------|---|------|-----|-------------------------------------|---------------------------------------|
| 17 | 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 | 20 | | |
| Total Amount in Rs | | | | | |
| B. | MCBs, DBs and Cable Trays | | | | |
| 1 | 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.) | | | | |
| 1.1 | 8way, Double door | Each | 2 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|-----|-------------------------------------|---------------------------------------|
| 2 | 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) | | | | |
| 2.1 | 4 way, Double door | Each | 1 | | |
| 2.1 | 6 way, Double door | Each | 4 | | |
| 2.3 | 8 way, Double door | Each | 1 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|-----|-------------------------------------|---------------------------------------|
| 3 | Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. | | | | |
| 3.1 | 40 amps | Each | 6 | | |
| 4 | Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliampere in the existing MCB DB complete with connections, testing and commissioning etc. as required. | | | | |
| 4.1 | 25 amps | Each | 4 | | |
| 4.2 | 40 amps | Each | 2 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|-----|-------------------------------------|---------------------------------------|
| 4.3 | 63 amps | Each | 2 | | |
| 5 | 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. | | | | |
| 5.1 | Single pole | Each | 80 | | |
| 5.2 | Triple pole | Each | 10 | | |
| 5.3 | Triple pole and neutral | Each | 6 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|-----|-------------------------------------|---------------------------------------|
| 6 | Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required. | Each | 30 | | |
| 7 | 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 | 5 | | |
| 8 | 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 | 6 | | |
| 9 | 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 | 1 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|---------------------------|---|------|-----|-------------------------------------|---------------------------------------|
| 10 | Supply and installing 150mm x 50 mm depth x 1.6mm thick 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 | m | 120 | | |
| 11 | Supply and installing 300mm x 50 mm depth x 1.6mm thick 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 | m | 180 | | |
| Total Amount in Rs | | | | | |
| C. | Earthing | | | | |
| 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 | 6 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|---------------------------|--|------|-----|-------------------------------------|---------------------------------------|
| 2 | Supply and laying 25mm x 5mm GI strip at 0.5m below ground as strip earth electrode, including connection / terminating with nut, bolt, spring, washer etc as required (Jointing shall be done by overlapping and with 2 sets of GI nut bolt & spring washer spaced 50mm). | m | 40 | | |
| 3 | Providing and fixing 25 mm X 5 mm GI strip on surface or in recess for connections etc. as required. | m | 200 | | |
| 4 | Providing and fixing 8 SWG dia G.I. wire on surface or in recess for loop earthing as required. | m | 120 | | |
| Total Amount in Rs | | | | | |
| D | Lighting Conductor | | | | |
| 1 | Providing and fixing GI tape of 20 mm x3mm thick on parapet or surface of wall for lightning conductor complete as required (For vertical run) | m | 60 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|---------------------------|--|------|-----|-------------------------------------|---------------------------------------|
| 2 | Providing and fixing testing joint made of 20mm x3mm thick GI strip 125mm long , with 4 nos of G.I bolts ,nuts, chuch nuts and spring washers etc. complete as required. | m | 4 | | |
| 3 | Providing and laying G.I tape 32mm x 6mm from earth electode directly in ground as required. | m | 180 | | |
| Total Amount in Rs | | | | | |
| E. | 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 direct in ground including exavation , sand cushioning, protective covering and refilling the trench etc as required. | | | | |
| 1.1 | Upto 35 sq. mm | m | 50 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|-----|-------------------------------------|---------------------------------------|
| 2 | Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in existing RCC /Hume / Metal pipe as required. | | | | |
| 2.1 | Upto 35 sq. mm | m | 20 | | |
| 3 | 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. | | | | |
| 3.1 | Upto 35 sq. mm (clamped with 1mm thick saddle) | m | 110 | | |
| 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. | | | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|-----|-------------------------------------|---------------------------------------|
| 4.1 | Upto 35 sq. mm (clamped with 1mm thick saddle) | m | 300 | | |
| 5 | 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 | 10 | | |
| 6 | 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. | | | | |
| 6.1 | 3.5 x 35 sqmm cable | Each | 6 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|-----|-------------------------------------|---------------------------------------|
| 6.2 | 3.5 x 25 sqmm cable | Each | 6 | | |
| 6.3 | 4 x 16 sqmm cable | Each | 16 | | |
| 6.4 | 4 x 10 sqmm cable | Each | 8 | | |
| 7 | Providing, laying and fixing following dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep)and re-filling etc as required | | | | |
| 7.1 | 50 mm dia | m | 50 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|---------------------------|--|------|-----|-------------------------------------|---------------------------------------|
| 8 | 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 | 20 | | |
| Total Amount in Rs | | | | | |
| A. | LT Cables | | | | |
| 1 | Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable conforming to IS 7098 (part 1) amended upto date. | | | | |
| 1.1 | 3.5 x 35 sqmm cable | m | 120 | | |
| 1.2 | 3.5 x 25 sqmm cable | m | 80 | | |
| 1.3 | 4 x 16 sqmm cable | m | 200 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|---------------------------|--|------|-----|-------------------------------------|---------------------------------------|
| 1.4 | 4 x 10 sqmm cable | m | 80 | | |
| Total Amount in Rs | | | | | |
| B. | Light Fixtures | | | | |
| 1 | Supply of 1x28W flourescent tube fitting, powder coated CRCA steel channel with aluminium reflector complete with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamp etc complete as required. (Philips TMS122M 1xTL-528W EBT / GE GET CI 1x28 C/S HF / Wipro WIF 91128 SG / Bajaj BTIR 128) | Each | 170 | | |
| 2 | Supply of 2x28W flourescent tube fitting, powder coated CRCA steel channel with aluminium reflector complete with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamp etc complete as required. (Philips TMS122M 2xTL-528W EBT / GE GET CI 2x28 C/S HF / Wipro WIF 91228 SG / Bajaj BTIR 228) | Each | 80 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|--|------|-----|-------------------------------------|---------------------------------------|
| 3 | 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 | 10 | | |
| 4 | Supply and installation of 1x70W HPSV, IP65 die-cast aluminum street light fitting with toughened glass & pot optic reflector complete with control gear box, lamps etc complete with all mounting accessories like required size GI pipe, clamps, copper wire etc as required. (Philips CRP320 1xSONT70W TS / GE70SV/NG / Bajaj BGJRL 70 SV CG PDC) | Each | 15 | | |
| 5 | 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 | 20 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|---------------------------|---|------|-----|-------------------------------------|---------------------------------------|
| 6 | 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 | 10 | | |
| 7 | 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 | 15 | | |
| 8 | 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 | 10 | | |
| Total Amount in Rs | | | | | |
| C. | Telephone & Networking | | | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|---------------------------|---|------|-----|-------------------------------------|---------------------------------------|
| 1 | Supply and Installation of 10 pair MDF box, back mount frame and original krone connectors with all accessories. | Each | 2 | | |
| 2 | Supply and laying 10 pair 0.5 sqmm FR PVC insulated annealed copper conductor, jelly filled armoured telephone cable in surface / through pipe / including all accessories as required. | m | 150 | | |
| 3 | Supply and laying 10 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 | 150 | | |
| 4 | 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 | 5 | | |
| Total Amount in Rs | | | | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-----------|--|------|-----|-------------------------------------|---------------------------------------|
| D. | 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 TPN MCB | Each | 6 | | |
| 1.2 | 63A TPN MCB | Each | 2 | | |
| 2 | 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 | | |
| 3 | Supply, fabrication and fixing 3 nos MS Fire buckets on suitable fabricated MS angle iron stand with hook, painting with red paint & filled with dry sand as required with all required accessories. | Set | 2 | | |

| SI No | Description | Unit | Qty | RATE in Rs. (in figures & in words) | AMOUNT in Rs. (in figures & in words) |
|-------|---|------|------|-------------------------------------|---------------------------------------|
| 4 | Supply and providing First Aid Chart duly framed and placed in a conspicuous location for clear vision. | Each | 2 | | |
| 5 | Preparation, submission of drawings and applications for the installation and service connection to Electrical Inspectorate / Electricity board and obtaining Power allocation, sanction and energising of the installation, including obtaining sanction from the authorities complete Including providing necessary assistance to the client for obtaining sanctions. | Job | 1 | | |
| 6 | Removing and re-laying of armoured alumium / copper cable upto 300 sqmm from the existing cable gallery to the cable tray in the building including necessary tagging, clamping etc as required. | m | 250 | | |
| 7 | Supply, fabrication and installation of structural steel work fixed with or without connecting plate, including cutting, hoisting, fixing in position, bolting / welding in built up sections, and applying 2 coat of steel primer and 2 coat of approved shade paint for the support of cable tray, panels etc complete with all required accessories like anchor bolt, nut bolt, washer etc complete. | kg | 1800 | | |
| | Total Amount in Rs | | | | |