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|-------------------------------------------------|------------------------------------------------------------------------------------|
| STATE BANK OF INDIA                             |  |
| BOQ :ELECTRICAL WORKS PBB GUWAHATI BRANCH       |                                                                                    |
| BRANCH NAME : PBB BRANCH AT G.S. ROAD, GUWAHATI |                                                                                    |
| CARPET AREA : 3369 SQ FT                        |                                                                                    |

#### GENERAL NOTE

|   |                                                                                                                                                                                                                                                                                                                                                                                                     |
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| 1 | UPS input and Output wiring should be done with FRLS Insulated stranded copper conductor laid through M.S Conduit. ( From input                                                                                                                                                                                                                                                                     |
| 2 | All wires for circuit wiring and other wiring should be drawn inside M. S. Conduits Only unless otherwise specified                                                                                                                                                                                                                                                                                 |
| 3 | Specifications of all wires should be followed strictly as mentioned in the BOQ                                                                                                                                                                                                                                                                                                                     |
| 4 | All makes of materials should be strictly followed as mentioned in the detailed specifications of the Tender document                                                                                                                                                                                                                                                                               |
| 5 | Earthing Test Certificate should be provided alongwith the Final bill for further bill verification                                                                                                                                                                                                                                                                                                 |
| 6 | Single Line diagram showing the all the wiring including point wiring, computer and RAW power wiring, Circuit wiring etc. all complete                                                                                                                                                                                                                                                              |
| 7 | Only DATA and Voice point wiring is allowed to be carried out through MS Conduits                                                                                                                                                                                                                                                                                                                   |
| 8 | Only DATA and Voice point wiring is allowed to be carried out through MS Conduits                                                                                                                                                                                                                                                                                                                   |
| 9 | <b>MARKING OF DBs &amp; PREPARATION OF AS-BUILT SLD</b> - Marking/labelling of all DBs and panels with engraved/laminated identification name-plates indicating board name, source and load served, and preparation of complete As-Built Single Line Diagram (SLD) of the entire electrical installation, duly framed in glass/acrylic frame, and submission of the same along with the Final Bill. |

#### PART A: ELECTRICAL WORKS

| Sl. No | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Unit | Qty | Rate | Amount |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|------|--------|
|        | <b>SECTION-A</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |     |      |        |
| 1      | <b>Floor LT Cum APFC PANEL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |     |      |        |
| 1.1    | Supplying and installation of metal enclosed wall/ floor mounted front operated cubical type LT-cum-APFC switchgear panel suitable for indoor installation conforming to IS: 8623 (Part I & II). Panel sheet steel not less than 2mm with light structural section, dust & vermin proof, anti-corrosive two-coat primer + two-coat paint finish. All internal wiring PVC insulated 1100 V grade of required size. Bottom cable entry and bottom outgoing feeders. Panel shall incorporate a double bus-bar system of high quality copper of uniform cross section, complete with voltmeter, ammeter, CT, indicating lamps and selector switch flush mounted on the front as per drawing. <b>The panel shall additionally incorporate an INTEGRAL APFC SECTION comprising a microprocessor APFC relay, 2 stages x 5 kVAR and 3 stages x10KVAR (total 40 kVAR) capacitor banks with series detuned reactors (7%), stage duty contactors and a 100A 4-Pole MCCB, for automatic power-factor correction from 0.85 to 0.99.</b> |      |     |      |        |
| a      | Incomer:<br>250 A, 4-Pole (TPN) MCCB, 36 kA with ELR (0-3A) and CBCT - 1 No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |      |        |
| b      | Outgoings :-<br>100 A, 4-Pole MCCB for integral APFC panel (40 kVAR) - 1 No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |      |        |
|        | 100A, 4-Pole MCCB for main VTPN-1 connected via AC-1 40A Contactor (From Normal Bus Bar)- 2 No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |     |      |        |
|        | 40A, DP, C , MCB for UPS DBs- 2Nos. (From Essential Bus Bar)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |      |        |
|        | 63A, TPN MCCB - 2 No. (Spare/Future Provision outgoing way, ~20% of total outgoing) (From Normal Bus Bar)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |     |      |        |
| c      | 1 no. Multi Function Meter, connected through 3 Nos. of 200/5A CT and 16A Control MCB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |
| d      | 1 Set, TPN, Copper busbars of size 50mm x 10mm thk PVC insulated suitable for 300 Amp load with supplementary split Busbars one for- Emergency Loads including UPS loads and Another for Normal Loads                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |
| e      | 1 Set, RYB, indicating lamps with resistors and fuses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |
|        | Full Set as above                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Set  | 1   |      |        |
| 2      | <b>MCB DISTRIBUTION BOARD</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |     |      |        |
|        | Supplying, installation, testing and commissioning of surface/recess mounting, 220/415 volts prewired MCB distribution boards with all switchgears as specified below, of sheet steel, dust protected, duly phosphatized and powder painted, inclusive of 200 amps tinned uniformly rated electrolytic copper bus-bar, common neutral link, earth bar, din bar for mounting MCB/MCCB/RCCBs detachable gland/knock out plates and with built in loose wire box, and superior make terminal connectors for all incoming and outgoing circuits, duly prewired with adequate size of FR MS insulated copper conductor upto the terminal connector/neutral link and ready for installation as specified below.                                                                                                                                                                                                                                                                                                                  |      |     |      |        |
| 2.1.   | <b>S.I.T.C. of VTPN-1 [Main Distribution Board]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |     |      |        |

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|      | S & I of 6 Way Double Door VTPN DB for distribution to all loads under Normal Bus Bar for PBB (as indicated in the SLD), earth bar insulated from body -<br>100A, 4-pole, MCCB as incomer - 1 No.<br>Outgoings:<br>63 A TP MCB - 2 Nos.<br>40 A 10kA SP MCB (For L7PDB-1&2) - 8 Nos.<br>with all wiring connections.                                                                                                                | No    | 1  |  |  |
| 2.2. | S.I.T.C. of L&PDB-1 & L&PDB-2 [Lighting-cum-Raw-Power DBs, Section-A & Section-B respectively]                                                                                                                                                                                                                                                                                                                                      |       |    |  |  |
|      | S & I of 12 way SPN DB for distribution to all lighting and raw-power points of the respective Section (as indicated in the SLD), earth bar insulated from body -<br>40 A, 30 mA, Double Pole RCCB as incomer - 1 No.<br>10 A SP MCB (lighting, max 8 points/600W per loop) - 5 Nos.<br>16 A SP MCB (6A raw-power, max 2 switch-boards/MCB) - 4 Nos.<br>16 A SP MCB (16 A raw-power socket) - 1 No.<br>with all wiring connections. | No.   | 3  |  |  |
| 2.3  | <b><u>S.I.T.C. Of VRF AC MDB [MCB DB- AC]</u></b>                                                                                                                                                                                                                                                                                                                                                                                   |       |    |  |  |
|      | S.I.T.C. of AC-DB-A, Double-door 4 way VTPN VRF AC Distribution Board with all wiring connections.<br>Incomer:<br>100 A, 4-Pole MCCB - 1 Set<br>Outgoing:<br>63A TP MCB - 02 nos and 16 A SP MCB (VRE Indoor Unit) - 6 Nos.                                                                                                                                                                                                         | No.   | 1  |  |  |
| 2.4. | <b><u>S.I.T.C. of UPS-DB-A [UPS Distribution Board, Section-A]</u></b>                                                                                                                                                                                                                                                                                                                                                              |       |    |  |  |
| a    | S.I.T.C. of One no of 40A DP, C MCB in a 2way MCB Enclosure specially Marked for UPS Incoming Control                                                                                                                                                                                                                                                                                                                               | No.   | 2  |  |  |
| b    | S & I of 12 way SPN MCB DB for all UPS workstation points of Section-A (as indicated in the SLD), earth bar insulated from body -<br>Incomer: 40A, 10kA DP RCCB - 1 Set<br>Outgoings:<br>32A, 10kA DP MCB followed by a AC-1 40A Contactor- 1Set<br>25A, 10kA, DP, MCB- 1 Nos.<br>fed from UPS output, with all wiring connections.                                                                                                 | No.   | 1  |  |  |
| c    | S & I of 12 way SPN MCB DB for all UPS workstation points of Section-A (as indicated in the SLD), earth bar insulated from body -<br>Incomer: 32A, 30mA, DP RCCB- 1 Nos.<br>Outgoings:<br>16A, 10kA, DP, MCB- 8 Nos.<br>fed from UPS output, with all wiring connections.                                                                                                                                                           | No.   | 1  |  |  |
| d    | S & I of 8 way SPN MCB DB for all Emergency services (Fire Alarm, Network, Panic Alarm, CCTV) (as indicated in the SLD), earth bar insulated from body -<br>Incomer: 25A, 30mA, DP RCCB- 1 Nos.<br>Outgoings:<br>6A, 10kA, DP, MCB- 6 Nos.<br>fed from UPS output, with all wiring connections.                                                                                                                                     | No.   | 1  |  |  |
| e    | S.I.T.C. of 63A, TPN MCCB in dust & vermin-proof IP-rated metal enclosure for UPS Input Protection (from Input DB to UPS) - 1 No.                                                                                                                                                                                                                                                                                                   | No.   | 1  |  |  |
| f    | S.I.T.C. of 63A, TPN MCCB in dust & vermin-proof IP-rated metal enclosure for UPS Output Protection (from UPS Output to UPS Output DB) - 1 No.                                                                                                                                                                                                                                                                                      | No.   | 1  |  |  |
|      | <b>SECTION B- Cables and Terminations</b>                                                                                                                                                                                                                                                                                                                                                                                           |       |    |  |  |
| 3.0  | <b>Supplying, Installation, Testing &amp; Commissioning of LT Cable rated for 1100 Volts AC as per IS Standard with necessary accessories with fine resistance cable. (Make: - Finolex-FR / Polycab Havells and/or any other Brands as Directed by Engineer-in-Charge)</b>                                                                                                                                                          |       |    |  |  |
| i    | 3.5 C X 120 sq.mm. at 1100 volts grade XLPE insulated Cu Conductor armoured cable with 10 gauge earth GI wire                                                                                                                                                                                                                                                                                                                       | Metre | 35 |  |  |
|      | 3.5 Core x 35 sq.mm., 1100 V grade XLPE insulated Cu conductor armoured cable with 8 SWG GI earth wire (Incoming supply to LT-cum-APFC panel)                                                                                                                                                                                                                                                                                       | Metre | 15 |  |  |
| 3.1. | 4 Core x 16 sq.mm. Cu armoured XLPE cable (LT panel to VTPN-1, ACDB and APFC sub-mains)                                                                                                                                                                                                                                                                                                                                             | Metre | 45 |  |  |
| 3.2. | 4 Core x 6 sq.mm. Cu armoured XLPE cable (LT panel to L&PDB-2, Section-B; VTPN-1 to L&PDB-1)                                                                                                                                                                                                                                                                                                                                        | Metre | 25 |  |  |
| 3.3. | 4 Nos. X 6 Sq.mm. & 1corex2.5 PVC insulated Copper flexible cable in 32mm dia M.S. conduit with suitable size glands for Termination, for UPS Input/Output wiring.                                                                                                                                                                                                                                                                  | Metre | 40 |  |  |
| 4.0  | <b>Supplying, Installation, Testing &amp; Commissioning of LT Cable Termination (Make: - Dowells /Jainsons) (Note: Incoming and outgoing termination consider one set.)</b>                                                                                                                                                                                                                                                         |       |    |  |  |
| 4.1. | 3.5 Core x 120 sq.mm. Cu armoured cable.                                                                                                                                                                                                                                                                                                                                                                                            | Set   | 2  |  |  |

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| 4.1. | 3.5 Core x 35 sq.mm. Cu armoured cable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Set  | 2  |  |  |
| 4.2. | 4 Core x 16 sq.mm. Cu armoured cable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Set  | 6  |  |  |
| 4.3  | 4 Core x 6 sq.mm. / 3R x 6 sq.mm. (UPS flexible)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Set  | 4  |  |  |
|      | <b>SECTION-C</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |    |  |  |
| 5    | <b>POINT WIRING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |    |  |  |
| 5.1  | Supply & installation of concealed point wiring using 3 x 1.5 sqmm stranded FRLS copper conductor in M.S Conduit including the cost of circuit wiring from the relevant DB's with 3x 2.5 sq mm stranded FRLS copper conductor in M.S Conduit . PIN GRIP Lugs should be used for connection/ terminations at both the ends with proper colour coding of phase, neutral and earth wire ( Phase R,Y,B Neutral-Black & Earth - Green Colour). The rate shall also include concealed M.S Box, Cover Plate and Switches of grid plate type switches and sockets of approved shade and make as approved by Bank / Architect. Each circuit should not have more than 8 points / 800 W in one loop as per the following configuration.                                                                                                                                                                                                                                                                   |      |    |  |  |
| a    | Primary light points including the cost of 6A switch (Single Point-53 Nos. Double Loop Points-27 Nos., Triple Loop Point-5 Nos.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Pts  | 85 |  |  |
| b    | Secondary 6A Plug point on switch board. [SO]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Pts  | 14 |  |  |
| c    | 16/6 A Plug Point directly taken from PDB for hotplate/geyser / zerox / fridger etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Pts  | 3  |  |  |
| d    | Ceiling Fan/ Exhaust fan/ Wall Fan point consisting of 6A socket near fan and switch on light switch board, protected by a dedicated 6A SP modular MCB provided in the common switch board.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Pts  | 10 |  |  |
| e    | Wiring for Signages (Outdoor/Fascia) with 2R x 4 Sq.mm and 1 Rx 2.5 Sq.mm, PVC insulated copper conductor flexible cable to be connected to the SPN D/D consumer along with a Timer and Contactor unit installed in Electrical Room.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Set  | 2  |  |  |
| f    | S.I.T.C. of call bell with bell point .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Nos. | 4  |  |  |
| 5.2. | <b>COMPUTER/ RAW POWER WIRING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |    |  |  |
|      | Note- All sockets should be placed below the workstations as mentioned in the drawings but the controlling switch should fixed above the work stations and at place as directed by the architect                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |    |  |  |
| a    | Supply & Installation of concealed UPS or stabilized power plug points on workstations / table for computers using 3 x 2.5 sqmm stranded FRLS copper conductor in M.S Conduit including the cost of circuit wiring from the relevant DB's with 3 x 2.5 sq mm stranded FRLS copper conductor in M.S Conduit . PIN GRIP Lugs should be used for connection/ terminations at both the ends with proper colour coding of phase, neutral and earth wire ( Phase R,Y,B Neutral-Black & Earth - Green Colour). Each point shall consist of 3 Nos of 6A/16A 2 / 3 Pin sockets and 1 No 16A switch, wired together forming one point. Switches and sockets to be of approved shade and make. ( Only 2 tables served by one circuit from UPS DB/ Not more than 2 points shall be permitted per loop) Cost is inclusive of necessary cutting the walls/ partitions and carrying all the wires through M.S Conduit and again finishing the walls with Putty/ Cement/ POP to receive the final paint.. [SOC] | Pts  | 20 |  |  |
| b    | S & I of raw-power table points (one 6/16A socket with switch, flexible cable, circuit from L&PDB / VTPN-2). 18 nos Section-A (6A) + 2 nos Section-B (6A) = 20 nos. Through MS conduit; cost inclusive of wall cutting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Pts  | 30 |  |  |
|      | <b>SECTION-D</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |    |  |  |
| 6.1. | Earthing with copper earth plate 600 mm x 600mm x 3 mm thick for the LT-cum-APFC panel and UPS system as per IS 3043 - equipment/body GI earthing and dedicated UPS clean copper earthing, including 8 SWG copper/GI strip for loop earthing including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal or coke and salt complete as required. (for panels, servo stabilizer and IT system)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Each | 4  |  |  |
| 6.2. | Supply, laying and interconnection of GI (Galvanised Iron) earthing strip of size 25mm x 3mm (or as per site requirement) for bonding/interconnecting the bodies of all DBs, panels, conduits, light fixtures and other electrical equipment throughout the premises to the common earth grid, including clamps, bolts, nuts, paint and all accessories — complete as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RM   | 80 |  |  |
|      | <b>Note- Test Certificate for Earthing Shall be submitted with final bill for processing of final bill for payment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |    |  |  |
|      | <b>SECTION-E</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |    |  |  |
| 7    | <b>LIGHTING FIXTURES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |    |  |  |

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| 7.1. | <p>Supply, installation, testing and commissioning of maintenance-free, round LED downlight with die-cast aluminium housing and slim/backlit design suitable for low false-ceiling height applications, of the following specifications:</p> <p>Wattage: 15 W<br/> Colour Temperature (CCT): 6500 K<br/> Cut-out diameter: Ø105 mm<br/> Overall dimension: Ø120 x 28 mm<br/> Housing material: Die-cast aluminium<br/> Make: As approved by the Engineer-in-Charge / Architect, of reputed make conforming to relevant BIS/IS standards.</p> <p>The fixture shall be complete with driver, all necessary mounting accessories, and wiring connections as required for satisfactory operation. 3 (three) years written warranty from the manufacturer/supplier to be submitted along with the Final Bill.</p> | Each | 60 |  |  |
| 7.2. | <p><del>PANEL LIGHT [PL]</del></p> <p>Supply, installation, testing and commissioning of high-efficacy, recess-mounted LED panel light with white powder-coated CRCA housing and fully mounted acrylic diffuser (2'x2'), having the following specifications:</p> <p>Wattage: 36 W<br/> Luminous Efficacy: 120 Lm/W (approx.)<br/> Colour Temperature (CCT): 6500 K<br/> Overall dimensions: 595 mm (L) x 595 mm (W) x 35 mm (H)<br/> Housing material: White powder-coated CRCA sheet<br/> Make: As approved by the Engineer-in-Charge/Architect, of reputed make conforming to relevant BIS/IS standards.</p> <p><del>Complete with driver and all necessary mounting accessories. 3 (three) years written warranty</del></p>                                                                              | Each | 46 |  |  |
| 7.3. | <p><del>RECESSED LED ALUMINIUM PROFILE LIGHT</del></p> <p>Supply, installation, testing and commissioning of recessed LED aluminium profile light, having the following specifications:</p> <p>Overall dimensions: 1200 mm (L) x 35 mm (W) x 35 mm (H)<br/> Wattage: 36 W<br/> Colour Temperature (CCT): 6000 K (Cool White)<br/> Make: As approved by the Engineer-in-Charge/Architect, of reputed make conforming to relevant BIS/IS standards.</p> <p><del>Complete with driver, end caps, mounting clips/channel and all necessary accessories for recessed installation. 3 (three) years written warranty from the manufacturer/supplier to be submitted</del></p>                                                                                                                                      | MTR  | 12 |  |  |
| 7.4. | <p>Supply, installation, testing and commissioning of recess-mounted COB/Spot light with die-cast aluminium housing (white finish), having the following specifications:</p> <p>Wattage 12/14W<br/> Colour: Cool White<br/> Cut-out size: Ø35 mm<br/> Overall dimensions: Ø43 mm x 102 mm (H)<br/> Make: As approved by the Engineer-in-Charge/Architect, of reputed make conforming to relevant BIS/IS standards.</p> <p>Complete with driver and all necessary mounting accessories. 3 (three) years written warranty from the manufacturer/supplier to be submitted along with the Final Bill.</p>                                                                                                                                                                                                        | Each | 14 |  |  |

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| 7.5   | <p><b>ROPE LIGHT</b><br/>Supply and fixing of IP65-rated LED rope light in POP/wooden cove, as per design and as directed by the Architect, having the following specifications:<br/>Rated input voltage: 220–240 V AC<br/>Colour: Cool White or as desired<br/>Supplied in rolls of 45 metres, cuttable to required sizes on site<br/>Suitable for indoor application<br/>Make: As approved by the Engineer-in-Charge/Architect, of reputed make conforming to relevant BIS/IS standards.<br/>Complete with all drivers and necessary accessories as required for proper installation and operation. 3 (three) years written warranty from the manufacturer/supplier to be submitted along</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Mtr  | 32 |  |  |
| 8     | <b>WALL FAN, CEILING FAN &amp; EXHAUST FAN (As per Direction of Engineer-in Charge)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |    |  |  |
| 8.1.  | Supply, installation, testing and commissioning of 400-450mm dia ,heavy-duty, high-speed wall-mounted fan. The fan shall feature a robust metal body and motor cover, 3 heavy-duty metal blades, and a close-mesh powder-coated metal safety guard. Fan must be complete with a 100% copper wound motor, built-in thermal overload protector, jerk-free oscillation, and a 3-step speed control (via pull-cord/switch). Designed to operate on 230V 50Hz AC supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Each | 2  |  |  |
| 8.2   | Supplying including fitting fixing of 1200mm dia star rated BLDC (Brushless DC) energy-efficient Ceiling fan complete with all accessories like down rod, canopy etc. of following sweeps with making necessary connection cable, as approved by the Deptt.s etc. as required complete and as directed by the Department [Without regulator], of reputed make as approved by the Engineer-in-Charge, suitable for non-air-conditioned areas (landlord providing 100% power back-up).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Each | 4  |  |  |
| 8.3   | <b>Exhaust Fan-</b> Supply, installation, testing and commissioning (SITC) of wall/window mounted propeller-type exhaust fan. Fan shall be complete with heavy-duty motor, gravity louvers to prevent backflow, and pre-treated, powder-coated housing for corrosion resistance. Motor shall be continuously rated single-phase 230V 50Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Each | 4  |  |  |
| 9     | <b>Wiring for T.V at B.M AND WAITING AREA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |    |  |  |
| i     | Supply and laying of co-axial RG 6 cable for TV terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Mtr  | 45 |  |  |
| ii    | Supplying and fixing of T.V Outlet in Modular Sheet /G.I Box etc as required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Nos. | 4  |  |  |
| iii   | Supplying and fixing of HDMI PORT as required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Nos. | 5  |  |  |
| iv    | Supplying and fixing of HDMI Cable with inbuilt port as required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mtr  | 30 |  |  |
| 10    | <b>A.C POINT WIRING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |    |  |  |
|       | <b>A.C. POWER POINT WIRING — VRF INDOOR UNITS (IDU)</b><br>A.C. power point wiring for VRF Indoor Units (IDU) from the A.C. DB of the respective VRF Outdoor Unit (ODU), with 1100 volt grade 2 Nos. single core 2.5 sq.mm. + 1 No. 2.5 sq.mm. (Green colour for earthing) PVC insulated flexible FRLS copper conductor cable, through suitable size M.S. conduit (ISI marked embossed on conduit surface), complete with junction box, circular box, elbows, bends, couplers and other accessories, on surface above false ceiling or concealed by chase cutting on wall, complete with 3-pin 6/16 A plug-cum-switch socket arrangement (with mounting box & front plate), of reputed make as approved by the Engineer-in-Charge/Architect, installed near the respective AC Indoor Unit. A separate dedicated circuit shall be drawn for each IDU from the A.C. DB of its respective VRF ODU. Rate to include interconnection, mending good all damages to original finish, painting etc. as required. All connections of wires to be done by means of 'Wago' type connectors. Rates shall be inclusive of cost of wires, wiring, plug-cum-switch socket mounting accessories testing all complete | No   | 6  |  |  |
|       | <b>A.C. POWER POINT WIRING — NON-VRF (SPLIT/WINDOW) AC UNITS</b><br>A.C. power point wiring for Non-VRF (Split/Window) AC units from A.C. DB with 1100 volt grade 2 Nos. single core 4 sq.mm. + 1 No. 2.5 sq.mm. (Green colour for earthing) PVC insulated flexible FRLS copper conductor cable, through suitable size M.S. conduit (ISI marked embossed on conduit surface), complete with junction box, circular box, elbows, bends, couplers and other accessories, on surface above false ceiling or concealed by chase cutting on wall, complete with AC power unit having 25 A socket, 20 A starter, mounting box & front plate, of reputed make as approved by the Engineer-in-Charge/Architect, interconnection, mending good all damages to original finish, painting etc. as required. All connections of wires to be done by means of 'Wago' type connectors. Rates shall be inclusive of cost of wires, wiring, sockets, starter, testing all complete.                                                                                                                                                                                                                                  | NOS  | 2  |  |  |
| 11    | <b>MISCELLANEOUS WORKS (IF Required)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |    |  |  |
| 11.1. | Supplying and fixing of following size of Perforated pre painted ms Cable Trays with perforation not more than 17.5% in convenient section, joined with connector, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. Rates shall be included tee band reducers etc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |    |  |  |
| a     | 150x150 x50 2mm thick Cable tray (For Main Incoming)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RM   | 30 |  |  |
| b     | 200x200 x50 2mm thick Cable tray (For Submains)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | RM   | 30 |  |  |

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |   |  |  |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|--|--|
| 11.2     | <b>MASTER SWITCH NEAR ENTRANCE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |   |  |  |
|          | Provision and installation of master switch nearest to the entrance of the premises (Inside Branch Premises) as indicated in the drawing and as directed by the Architect. The connection should be such that when the same is switched off then all electrical connection in RAW Power & UPS Power goes off except the 24x7 power supply connection for CCTV, Fire Alarm, Panic Alarm & Network Point. Rates shall be inclusive of provisioning of necessary bifurcation of Normal Power Supply and 24x7 Power supply with the help of installing a busbar near the DB or by any other ways as deemed fit and as directed by the Architect as per the existing site conditions. The rate shall also be inclusive all necessary wirings as shall be required for bringing the line from the DB's at the UPS Room to the Location of the Master Switch near the entrance and no extra claim for wiring shall be allowed. The master switch shall be a TPN (4-Pole) Isolator/Changeover Switch of adequate current rating (minimum 63A, or as per actual connected load) housed in a dust & vermin-proof IP54-rated metal enclosure, complete with ON/OFF RYB indicating lamps, an engraved identification name-plate and a lockable operating handle of reputed make as approved by the |     |   |  |  |
| a        | <b>For all UPS Line Wiring</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No  | 1 |  |  |
| b        | <b>For All RAW and Power Line wiring</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No  | 1 |  |  |
| 11.3     | SITC of 8 Module (125mmX125mm) PVC board for Fitting of indicator Bulbs directly connected from LDB, PDB, ACDB and UPS DB with necessary holders etc. with proper marking TO BE PLACED NEAR THE MAIN ENTRANCE. Rates shall be inclusive of all necessary wirings as shall be required to connect this indicator board with the LDB, PDB, ACDB & UPS DB placed in the UPS Room                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No. | 1 |  |  |
| <b>A</b> | <b>TOTAL OF ELECTRICALWORKS for FIRST FLOOR (Excl. GST)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |   |  |  |