<table>
<thead>
<tr>
<th>NO.</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
<th>QTY</th>
<th>RATE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SUPPLY, LAYING, LUGGING, DRESSING, GLANDING, FINISHING, TESTING AND COMMISSIONING OF POWER CABLE: Following 1.1KV grade fire resistant A2XFY XLPE armored aluminium conductor cable with one no. 10 SWG GI wire, laying of the cable by making 200MMX800MM cable trench with bricks and sand protection, partly through 40MM GI Pipe and partly on wall/column including supply and fixing with 300mm apart MS clamps/galvanized bar saddles and double compression type brass cable gland Dowel make along with rubber rings for dust and moisture proof entry of the cable and finishing the ends by crimping method. It will be contractors responsibility to make the necessary arrangements for obtaining electrical connection for the bank, i.e liaisoning with electricity board. Make (NICCO/RR/POLY Cab/UNIVERSAL/MESCAB)</td>
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<td>30</td>
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<tr>
<td>1</td>
<td>1.1 EVCX50 50MM cable Main incoming cable</td>
<td>Mtr</td>
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<td>2</td>
<td>MAIN INCOMING SOURCE PANEL (MISP):</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
|     | Supply, installation, testing and commissioning of main incoming (MIP) Panel suitable for wall/floor mounted indoor type, air insulated, totally enclosed vermin-proof (IP 42), dead front, cubic type, 2 mm thick sheet steel enclosure use on 415 V, 3 Ph., 4 wire, 50 Hz. A.C. system, instrumental panel, CTs, incoming and outgoing cable compartmen. The Panel shall be complete with switches as per site requirement, interconnection, G.I. earth busbar of adequate size covering the total length of switch board with drilled holes, G.I. bolts, nuts, washers etc. as directed by E-I-C. The cubic should be painted with two coats of light grey synthetic enamel paint over two coats of zinc chromate primer, the complete fabrication, construction shall be done as per the site condition and conforming to the relevant IS. Name plate of Panels Danger Board, incoming and outgoing feeders with Ampere rating of switches are to be fixed up on front door above or below the respective switches. Approval of manufacturer’s drawings from E-I-C. The Panel consists of the following 

INCOMING: No. 415V, 125A 4P MCCB (36 KA). 1 No. 415V, 125A 4P On-Load Changeover Switch No. 1 Digital Multi Function Meter (MFM) for Current, Voltage, Frequency, Power. No. 1 LED Phase indicating lamps. No. 1 Suitable CTs(200/5) PVC sleeved TPN Tinned Copper Busbar 30mm x 6mm for phases and neutral. G.I. EARTH BUSBAR 30mm x 3mm covering the total length of panel. 

OUTGOING: 

Termination I (To be connected with C.O.) No. 1 No. 63A (10 KA) DP MCB for UPS supply, BM AC, System AC & LDBs etc. No. 1 No. 63A (10 KA) TPN MCB. 

Termination II (Not to be connected with C.O.) 

No. 1 No. 63A (25KA) 4P MCCB for ACDB 

UPS INCOMING DB: Supply of all required materials and fixing of input UPS box (Company made) having provision of the following arrangement complete with all respects per the direction of engineer in charge 

No. 1 No. 63A (10KA) DP MCB. 2 No. 2 No. 4 pole 40A 10KA MCB if UPS is 3 Phase 

UPS OUTGOING DB: Supply of all required materials and fixing of output UPS box (Company made) having provision of the following arrangement complete with all respects per the direction of engineer in charge 

Incoming: 1 No. 63 A DP MCB 

Outgoing: 3 No. 40A (10KA) DP MCB 

AC/DC/RAW POWER DB/ LIGHT DB / COMPUTER DB 

Supply and installation of following metallic double door MCB Distribution Board with MCB having breaking capacity of 10 KA (minimum) complete with busbar, interconnection, painting, mounted on flat iron frame on wall/flushed with finished wall by chase cutting, mending good to original finish painting etc. as required. Name plate & number of DBs are to be fixed up on front door of DBs for their identification. MCB -C SERIES) DB shall be of the same make of mcb 

(a) ACDB: Consumer unit TPN MCB DB complete with busbar and the following MCBs. 

INCOMING: No. 1 No. 415V 63A 10KA FP MCB 

OUTGOING: No. 1 No. 240V 32A 10 KA SP MCB, 3 Nos. 240V 25A 10 KA SP MCB 

(b) COMPUTER DISTRIBUTION BOARD (CDB): Supply and installation of following metallic double door MCB distribution board with RCB0 of 100mA sensitivity. SPN 8 way MCB DB complete with bus bar and the following RCB0 

Incoming: No. 1 No. 240V 40A DP RCB0, Outgoing: 8 No. 240V 10A SP MCB 

(c) LDB / RPDB: Consumer unit SPN MCB DB complete with busbar and the following MCBs. 

INCOMING: No. 1 No. 240V 32A 10KA DP MCB 

OUTGOING: No. 1 No. 240V 10A to 16A 10 KA SP MCB
5. **SUBMAIN WIRING**

Supply & laying of submain wiring with following sizes 1100 V grade, single core, FRLS PVC insulated multi stranded copper conductor wire (IS:694) in pre - laid (as per ISI) M.S. conduit including interconnection, painting etc. as required to be interconnected in all respect.

- With 4 nos. 10 Sq.mm + 1 nos. 2.5 Sq.mm. (green colour for earth) PVC insulated copper wire from Main panel to ACOBs.  
  Mtr 30

- With 2 nos. 6 Sq.mm + 1 no. 2.5 Sq.mm. (green colour for earth) PVC insulated copper wire from Main panel to UPS Incomig DB/UUPS Outgoing to UPS O/G DB/LDB/RPDB/CDB.  
  Mtr 90

- With 4 nos. 6 Sq.mm + 1 no. 2.5 Sq.mm. (green colour for earth) PVC insulated copper wire from Main panel to UPS Incomig DB/UUPS if UPS is three phase).  
  Mtr 25

- With 2 nos. 2.5 Sq.mm + 1 no. 1.5 Sq.mm. (green colour for earth) PVC insulated copper wire.  
  Mtr 20

- **COMPUTER SOCKET OUTLET WITH WIRING**

  Computer socket outlet cluster point including supply and fixing of modular type socket outlet clusters components and its wiring from CDB, complete in all respect as detailed below. Each computer socket outlet cluster comprising the following.

  - No. 16A modular type common controlling switch with indicator on table top with 2 Nos. 2.5 Sq.mm. + 1 x 1.5 Sq.mm. (green colour for earth) PVC insulated copper wire in pre - laid (as per ISI) M.S. conduit including interconnection, painting etc. as required to be completed in all respect from CDB to Computer point.

  No. 8

- **COMPUTER SOCKET OUTLET AND ITS WIRING**

  Computer socket outlet cluster point including supply and fixing of modular type socket outlet clusters components complete in all detail below. Each computer socket outlet cluster comprising the following.

  - No. 16A modular type common controlling switch with indicator on table top with 2 Nos. 2.5 Sq.mm. + 1 x 1.5 Sq.mm. (green colour for earth) PVC insulated copper wire in pre - laid (as per ISI) M.S. conduit including interconnection, painting etc. as required to be completed in all respect from CDB to Computer point.

  No. 4

- **RAW POWER SOCKET OUTLET AND ITS WIRING**

  Raw power socket outlet cluster point including supply and fixing of modular type socket outlet clusters components AND WIRING 1100V grade, FRLS complete in all respect as detailed below. Each computer socket outlet cluster comprising the following.

  - No. 16/20A 5 pin modular type International sockets.

  No. 10

- **SITC of North-west make Ac power unit having 20A, single pole rating socket. MCB with plug, plug top starter in sheet steel enclosure at proposed AC locations at 4.5 ft from the floor. The work shall also include Wiring from DB for AC power point with 2x4 sq. mm 1100V grade, FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 1 No. 2.5 sq. mm 1100V grade, FRLS PVC insulated copper conductor single core cable for loop earthing as required.

  No. 8

- **a. Copper plate Earthing:** Supply of material and installation of earth electrode made out of G.I. nut bolts, washers and 600x600x3 mm size copper plate including cost of charcoal salt and good quality soil, water pouring arrangements, brick masonry enclosure on top with removable CI cover and complete with labour for excavation of pit conforming of IS:1043/1987 and as per direction of Engineer-in-charge.

  No. 1

- **b. SITC of OBO Betterman/KJ/UEF eco safe/ make earth system – UL Listed Earth Electrode/ Copper bonded low carbon steel electrode, coating 250 microns**

  Tests as per IEC 62561-2

  Meets the requirement of IS 3043 and IEC 60364-5-54

  Tested for short circuit withstanding capacity

  High tensile strength

  In one set it should include:

  - One nos. of Earthing rod-Type 17 3000 CCER, Length – 3000 mm.

  - 3/8" Dia – 17.2 mm Copper bonded low carbon steel Electrode WITH 250 microns copper bonded

  - One bag (25 KG) Earth Enhancement Compound conforming to IEC 62561-7

  - Two nos. of universal clamp. The work shall also include required masonry work, CI cover plate & Earthing name plate. The vendor shall also submit the earth test report with required values. Pics of earthing to be shown.

  No. 1

- **Supply and laying of 8 SWG Cu cotton coated wire in 20mm dia rigid PVC conduit for earthing From the existing earth pit to the Main panel/UPS**

  Mtr 90

- **SITC of Earth distribution box (100A bar station) to be installed in the branch near Main Panel comprising of a bus bar of 3x25x180mm cu strip**

  SET 1

---

**POINT WIRING**

Point wiring with 1100 V grade 3 nos. single core 1.5 sq.mm. and 1 for common earth by looping method. PVC insulated stranded copper conductor wire (IS:694) through suitable size M.S. conduit (ISI marked embossed on conduit surface) by thred cutting, complete with junction box, circular box, elbows, bends, couplers and other accessories on surface above false ceiling or concealed by chase in donation wall from light & fan switch board to light, fan & 6A socket outlet on the same switch board or separately mounted switch board. The work includes supply and fixing of all materials such as modular type 6A switch for light and fan point, 6A 2/3 pin shuttered socket outlet with switch in each balcony, 3 plates ceiling rose / angle or batten holder 3 plate outlet etc. as required. The point wiring also includes circuit wiring with 1100 V grade 2 nos. single core 2.5 sq.mm. + 1 no. single core 1.5 sq.mm. PVC insulated stranded copper conductor cable (IS:694) through suitable size M.S. conduit as described above from DB to switch board, interconnection, mending good all damages to original finish, painting etc.

- 1 Light control by 1 switch
  No. 18

- 2 Light control by 1 switch
  No. 16

- 10 x 6A switch wiring
  No. 10

- Exhaust fan point
  No. 6

- Ceiling fan point with supply and fixing of Electronic Regulator (2 module step, 120 watt rating)
  No. 4
NOTE:

No.

27 360

No.

22

No.

21

No.

18

30 No 1

26

No.

24

No.

19

No.

15

28

No.

25

Proper load distribution is to be done by the vendor. Load variation over 10% will be unacceptable.

9

4 Work completion certificate including required dismantling work if any will be provided by the branch manager.

All cables except the ones mentioned separately in the estimation have been included in their relevant sections.

3 pin 6/10A modular socket with switch in each board

Load calculation sheet, GA drawing for Main panel .THE CONTRACTOR SHOULD SUBMIT THE BUILTUP SLD OF PANEL,

Measurement sheet for the work done, load calculation sheet, GA drawing for Main panel THE CONTRACTOR SHOULD SUBMIT THE BUILTUP SLD OF PANEL

Supply and fixing of information outlet box suitable for HD 45 terminals including mounting box (PVC) top cover, to be fixed in a concealed manner in partition by necessary bolts & nuts or as directed at site. (MAKE- D-LINK, AMP, HCL, Legrand)

Supply & fixing of wall fan complete with all respect. (Make: Polar, Orient, CG, Havells, Usha.)

25 Supply and fixing of 36W Sx2 LED Panel light recessed surface mounted of Syska / Philips / Wipro 2G make complete with all accessories.

5 Supply & fixing of 18W LED / 2 Sallen fitting Syska / Philips / Wipro / CED complete with all respect.

Supply & laying of E-CAT 6 UTP cable for the Data Circuit through the PVC conduit, Rate to include or termination on both end or as directed by E/C. (MAKE- D-LINK, AMP, HCL)

Supply of 2 mtr. Long E-CAT 6 PATCH CHORD (Make: D-LINK, AMP, HCL, Legrand)

Supply and fixing of information outlet box suitable for HD 45 terminals including mounting box (PVC) top cover, to be fixed in a concealed manner in partition by necessary bolts & nuts or as directed at site. (MAKE- D-LINK, AMP, HCL, Legrand)

Supply & installation of 9U Rack with power supply arrangement, ventilation fan, mounting racks etc (Make: CISCO)

Supply & fixing of info. outlet box suitable for RJ 45 terminals including mounting box (PVC) & top cover, to be fixed in a concealed manner in partition by necessary bolts & nuts or as directed at site. (MAKE- D-LINK, AMP, HCL, Legrand)

Supply & fixing of 9W LED Bulb Syska / Philips / Wipro / CED / Baja in UPS Toilets complete with all respect.

Supply & fixing of 18W LED T5 Batten fitting Syska / Philips / Wipro / CG complete with all respect.

SITC of 9" dia 230V,1400 rpm exhaust fan as in toilets, ups room, toilets etc (Make: D-LINK, AMP, HCL, Legrand)

PART C- LAN CABLING WORK

25 Supplying and installation of switch 24 ports 10/100 BASE-TX ports, (D link) managed as approved by the Bank.

GRAND TOTAL (Excluding GST)

The rate quoted shall be firm and shall include all costs, allowances, Charges, levies, Royalties, cess,transportion etc. but excluding GST as applicable which will be reimbursed by the Bank as per Government norms prevailing from time to time.

1 The work must be guaranteed for a period of 12 months for its satisfactory performance from the date of completion and all defects cropping up within this period must be rectified at contractor's cost immediately. Contractors must visit the site before submitting their quotations.

2 Earthing test report, Megger test report & test certificates for the cables will be provided to the Electrical Engineer

4 Work completion certificate including required dismantling work if any will be provided by the branch manager.

7 Distance between power and electronic earthings must be at least 3.5 Mtr. In electrical room, ups room, there must be one emergency light point other than raw light point.

8 All cables except the ones mentioned separately in the estimation have been included in their relevant sections.

9 Proper load distribution is to be done by the vendor. Load variation over 10% will be unacceptable.

PART B- SUPPLY AND FITTING OF ELECTRICAL FITTINGS

Supply & fixing of 125 A TPN SFU with HRC fuses

7 Supply & installation testing and commissioning (STC’s) of following 1 PN SFU with HRC fuses in steel sheet enclosure with cable end box on MS Angle Frame / MS Legs/ wall with inter-connection, painting and finishing.

20 Supply & fixing of 9W LED Bulb Syska / Philips / Wipro / CG / Baja in UPS Toilets complete with all respect.

Supply of 2 mtr. Long E-CAT 6 PATCH CHORD

Supply & fixing of 20W LED street Light with suitable mounting pipe & UPL Lamp etc. of Syska / Philips / Wipro / CG / Baja complete in all respect

Supply & fixing of 30W LED Bulb Syska / Philips / Wipro / CG / Baja in UPS Toilets complete with all respect.

Supply & fixing of 25 A TPN SFU with HRC fuses

Supply of 2 mtr. Long E-CAT 6 PATCH CHORD

Supply & laying of E-CAT 6 UTP cable for the Data Circuit through the PVC conduit, Rate to include or termination on both end or as directed by E/C. (MAKE- D-LINK, AMP, HCL)

Supply & fixing of 36W Sx2 LED Panel light recessed surface mounted of Syska / Philips / Wipro 2G make complete with all accessories.

PART A- ELECTRICAL MAINS WORK

3 Supply & fixing of information outlet box suitable for HD 45 terminals including mounting box (PVC) top cover, to be fixed in a concealed manner in partition by necessary bolts & nuts or as directed at site. (MAKE- D-LINK, AMP, HCL, Legrand)

Supply & fixing of 9W LED Bulb Syska / Philips / Wipro / CG / Baja in UPS Toilets complete with all respect.

Supply & fixing of 20W LED street Light with suitable mounting pipe & UPL Lamp etc. of Syska / Philips / Wipro / CG / Baja complete in all respect

Supply & fixing of 30W LED Bulb Syska / Philips / Wipro / CG / Baja in UPS Toilets complete with all respect.

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Supply & fixing of 30W LED Bulb Syska / Philips / Wipro / CG / Baja in UPS Toilets complete with all respect.
<table>
<thead>
<tr>
<th>Category</th>
<th>Brands/Manufacturers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SWITCHES &amp; SOCKETS</strong></td>
<td></td>
</tr>
<tr>
<td>6A/16A SWITCHES, SOCKET, TELE/LAN SOCKET, ELECTRONIC REGULATOR, DIMMER</td>
<td>NORTH-WEST, LEGRAND, L&amp;T</td>
</tr>
<tr>
<td>ON/OFF SELECTOR SWITCHES</td>
<td>SIEMENS, L&amp;T, KAYCEE, CROMPTON, GEC</td>
</tr>
<tr>
<td>METAL CLAD SOCKET &amp; PLUS</td>
<td>SIEMENS, L&amp;T, LEGRAND</td>
</tr>
<tr>
<td>BUZZER/CALL BELL</td>
<td>BAJAJ, ANCHOR, SSK</td>
</tr>
<tr>
<td>INDICATING/MEASURING</td>
<td>AE, IMP, L&amp;T, GE, TELEMECANIQUE, PROK</td>
</tr>
<tr>
<td>KITKAT</td>
<td>GE, GEC, ANCHOR</td>
</tr>
<tr>
<td>LIGHT FIXTURES</td>
<td>PHILIPS, WIPRO, CG, GE, SYSKA, WIPRO</td>
</tr>
<tr>
<td>LED FIXTURES</td>
<td>PHILIPS, CG, GE, SYSKA, WIPRO</td>
</tr>
<tr>
<td>CAPACITORS</td>
<td>L&amp;T, CROMPTON</td>
</tr>
<tr>
<td>APFC PANEL</td>
<td>L&amp;T, SCHNEIDER, SIEMENS</td>
</tr>
<tr>
<td>CEILING/WALL FAN</td>
<td>CROMPTON, BAJAJ, ORIENT, POLAR</td>
</tr>
<tr>
<td>CABLE GLAND</td>
<td>HMI, BRACO, COMET</td>
</tr>
<tr>
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<td>DOWELL, 3D</td>
</tr>
<tr>
<td>HRC FUSES/BASE</td>
<td>AE, IMP, MECCO, ENERCON</td>
</tr>
<tr>
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<td>KAPPA, IMP, AE, KALPA</td>
</tr>
<tr>
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<td>CROMPTON, BAJAJ, ORIENT, POLAR</td>
</tr>
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<td>SIEMENS, SCHNEIDER, ABB</td>
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