

| CANARA BANK   |  |      |      |                           |                             |
|---|--|------|------|---------------------------|-----------------------------|
| CIRCLE OFFICE TIRUPATI  |  |      |      |                           |                             |
| BOQ FOR ELECTRICAL WORKS AT: BRANCH AT CANARA BANK MULAVANKA BRANCH EXISTING PREMISES |  |      |      |                           |                             |
| S. NO.  | DESCRIPTION OF ITEM  | QTY  | UOM  | RATE (Rs.)<br>(Excl. GST) | AMOUNT (Rs.)<br>(Excl. GST) |
| 1   | Making temporary connections and shifting of points all across the Branch and for workstations (Electrical, UPS and telephone) to enable smooth functioning of the branch during renovation all complete as per the instructions of Bank's Engineer/ Architect. Item to include supplying all wires, cables, conduits etc. for the same. Nothing extra shall be payable in this regard   | 1.00 | Job  |                           |                             |
| 2   | SITC of 3 Nos. 200 Amp. Kit-kat Fuse unit along with 200 Amp. neutral link on wooden board of size 2'0" x 2'0" complete with connections complete in all respect to the satisfaction of Bank.  | 1.00 | Set  |                           |                             |
| 3   | <b>ELECTRICAL PANEL</b><br>Design, manufacture, providing, storing & installing in position, effecting proper connection, testing and commissioning of panel made of 16 SWG, CRCA sheet steel. It shall be dust and vermin proof. It shall have compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required, duly painted from inside as well outside.<br>It shall have the following:<br><b>MAIN PANEL:</b><br>1 No.100 Amp. TPN, MCCB (25 KA breaking capacity),<br>Bus bars 100 Amp., 3 phase, 4 strips, 415 volts, 50 Hz. copper busbars with colour coded PVC heat shrinkable sleeves. <b><u>There should be 2 sets of BUS BAR in such a way that AC load should not be connected to GENERATOR power.</u></b><br>100 Amp. Changeover Switch<br>Instruments: Digital Multi function Meter of standard make for displaying Input Voltage, Ampere, Power factor, KWH used with CTs. | 1.00 | No.  |                           |                             |
|   | <b>OUTGOING:</b><br>2 Nos. 32 Amp. TP MCB (For LDB, PDB, Branch UPS, Inverter and Spare Feeder) from Generator Powered Bus.<br>2 Nos. 63 Amp. TP, MCB (For AC DB and Spare Feeders) from Non-Generator Powered Bus.<br>4 Nos. 32 AMP DP MCB. 3 Nos (for Glow Sign board, Strong Room, and spare feeder) from Generator Powered Bus.<br>The design of panel should be got approved by the Architect before manufacturing. Also, the provision for 1/2 spare outgoing should be considered for future expansion. The job shall be completed to the satisfaction of the Bank.   |      |      |                           |                             |
| 4   | <b>UPS I/P, O/P AND DISTRIBUTION &amp; INVERTER INPUT &amp; DISTRIBUTION</b>   |      |      |                           |                             |
| a.  | SITC of 32/40 Amp. TP MCB in enclosure Double Door complete (Branch and Inverter Incomers) complete in all respects as required.   | 3.00 | Nos. |                           |                             |
| b.  | SITC of 20/32 AMP Modular plug & socket along with MCB & plug top complete as per requirement and satisfaction of Bank. (2 for Branch's UPS Input, 2 for Branch's UPS Output & ATM)  | 6.00 | Nos. |                           |                             |
| c.  | SITC of 12 WAY SPN Double Door DB complete with 1 No. 40 AMP DP MCB as incomer and 12 NOS. 6-10 AMP SPMCB as outgoing <b>for Branch UPS power distribution to Computer points on Staff Counters / Tables.</b>  | 1.00 | No.  |                           |                             |
| d.  | SITC of 8 WAY SPN Double Door DB complete with 1 No. 32 AMP DP MCB as incomer and 6 NOS. 6-10 AMP SPMCB as outgoing <b>for UPS power distribution points for ESSENTIAL LOADS like CCTV System, Fire &amp; Burglar Alarm Systems, Networking Rack, ATM and select Light points powered by UPS.</b> Three way LED indicator lamps to be included with DB for power load , AC load and UPS load to be located in front of CCTV camera.  | 1.00 | No.  |                           |                             |
| f.  | SITC of 40/63 Amp. Rotary Phase selector switch complete with RYB indication in enclosure for Branch's UPS input power network and Inverter. Complete in all respect as required.  | 1.00 | No   |                           |                             |
| 5   | <b>RAW POWER &amp; FAN, LIGHTING DB &amp; AC DISTRIBUTION BOARD</b>  |      |      |                           |                             |
| a.  | SITC of 4 WAY HTPN DB IP43,Iko9, complete with 1 No. 63 AMP TP MCB as incomer and 12 NOS. 6-32 AMP. SPMCB for out going as LDB, complete in all respect as required.   | 1.00 | Nos. |                           |                             |
| b.  | SITC of 6 WAY HTPN DB IP43,Iko9, complete with 1 No. 63 AMP TP MCB as incomer and 18 NOS.18/20 AMP. SPMCB for out going as PDB & AC DB complete in all respect as required.  | 1.00 | Nos. |                           |                             |
| c.  | SITC OF 4-way V-TPN DB (AC DB/ Power DB)<br><b>Incomer : 1 No. 63 Amp TPN (10 KA) MCCB</b><br><b>Outgoing : 2 Nos. 32 Amp (10 KA) TP MCB</b><br>: 6 Nos. 16/25 Amp (10 KA) SP MCB  | 0.00 | Nos. |                           |                             |
| 6   | <b>CABLES</b>  |      |      |                           |                             |

|          |   |       |      |  |  |
|----------|---|-------|------|--|--|
|          | All cables / wires shall be routed through PVC conduits / bends / elbows etc., as required, of appropriate dia. The conduits shall be clamped firmly to the walls / columns / pillars etc. with clips / clamps and fasteners rigidly even if above false ceiling.   |       |      |  |  |
|          | Complete job shall include cutting chiseling in walls, floor and making good of all chases / cuts etc. with combination of cement-mortar, including painting with type and shade of existing wall. The work shall be completed to the satisfaction of Bank.<br><b>NO CABLE / WIRE / CONDUIT SHALL BE VISIBLE IN THE BRANCH HALL / CUSTOMER LOBBY / STAFF WORKING AREA.</b>  |       |      |  |  |
| a.       | SITC of 3.5 Core 50.0 Sq.mm Aluminium conductor Armoured Cable for service line connection up to Kit kat fuse unit complete in all respect as required.   | 14.00 | Mtr. |  |  |
| b.       | SITC of 3.5 Core 35.0 Sq.mm Aluminium conductor Armoured Cable for service line connection up to Kit kat fuse unit complete in all respect as required.   | 0.00  | Mtr. |  |  |
| c.       | SITC of 4 core 6.0 Sq.mm Copper conductor Unarmoured Cable from main Panel to<br>(a) LDB<br>(b) PDB<br>(c) Branch UPS input power supply.<br><b>Note: In case inverter is present at the branch, the wiring from LDB should be with 2x6.0+1x2.5 sqmm wiring mentioned below and not with 4 core 6.0 Sq.mm Cable</b>   | 16.00 | Mtr. |  |  |
| d.       | SITC of 2 runs of 6.0 Sq.mm and 1 no. of 2.5 Sqmm FRLS PVC Insulated Multistrand Copper conductor wire from selector switch to UPS to UPS Distribution boards   | 16.00 | Mtr. |  |  |
| e.       | SITC of 4 core 10.0 Sq.mm Copper conductor Unarmoured Cable from main Panel / Non Generator power Bus to<br>(a) AC DB<br>(b) Inverter   | 18.00 | Mtr. |  |  |
| f.       | SITC of Sub main Wiring for Strong room, Single Phase AC and Glow Sign Board with 2 No. 4.0 Sq.mm and 1 No. 2.5 Sq.mm Multistrand Copper conductor FR pvc/ xlpe insulated Wire in required dia pvc conduit complete in all respects as required.  | 15.00 | Mtr. |  |  |
| g.       | SITC of 2 runs of 10.0 Sq.mm and 1 no. of 2.5 Sqmm FRLS PVC Insulated Multistrand Copper conductor wire from selector switch to inverter  | 20.00 | Mtr. |  |  |
| h.       | SITC of 2C x 2.5 Sqmm copper earth wire from 6 way DB to network rack , CCTV Fire alarm etc   | 22.00 | Mtr. |  |  |
| i.       | SITC of 2C x 1 Sq mm copper wire from main panel to 3 way LED indicator   | 15.00 | Mtr. |  |  |
| <b>7</b> | <b>AC (Split and Cassette ) POINT</b>   |       |      |  |  |
| a.       | SITC of AC Point Wiring with 2 No. 4.0 Sq.mm and 1 No. 2.5 Sq.mm Multistrand Copper Wire & Modular plug & Socket with 10/16/25 Amp. SPMCB complete in all respect as required by the Bank (for 1.0 / 1.5 Tr Hi-Wall Split ACs) The wiring shall be done form DB to indoor or outdoor as per requirement at site   | 3.00  | Nos. |  |  |
| b.       | SITC of AC Point Wiring with 2 No. 6.0 Sq.mm and 1 No. 2.5 Sq.mm Multistrand Copper Wire & Modular plug & Socket with 20 Amp. SPMCB complete in all respect as required by the Bank (for 2.0 Tr Hi-Wall Split / Cassette ACs)   | 0.00  | Nos. |  |  |
| c.       | S & I of 40/63A (TPN/DP), MCB in sheet metal water proof IP-55 enclosure for giving supply to HVAC machines/equipt.   | 0.00  | No.  |  |  |
| <b>8</b> | <b>EARTHING</b>   |       |      |  |  |
| a.       | Preparation and commissioning of earth pits with PIP technology GEL type 50mmdia 3000mm long earth electrod. (One Dedicated Earthing for ATM UPS, Branch UPS and main panel)  | 2.00  | Nos. |  |  |
| b.       | SITC of Earthing conductor from earth terminal to load point with 6.0 sq mm multstrand copper conductor FR pvc /XLPE insulated cable in required dia pvc conduit complete in all respect as required.   | 28.00 | Mtr. |  |  |
| <b>9</b> | <b>UPS POINT</b>  | 12.00 | Nos. |  |  |
|          | Supply & Installation of point wiring for UPS or stabilized power plug points on workstations / table for computers using 3 X1.5 Sq.mm copper conductor multi strand FR PVC sheathed flexible wire including PVC conduite laid floor raceways/conduit and taken upto table top using PVC rigid or flexible conduits run within wooden/metal partitions. Each point consisting of 1 No. Phase Indication light,1 No.16A Switch ,1No, 16Amp and 2Nos 6A , 5/6 pin sockets & wired together forming one point. The earth wire of green color only. |       |      |  |  |

|           |  |       |       |  |  |
|-----------|--|-------|-------|--|--|
| <b>10</b> | <b>RAW POWER POINT</b>   |       |       |  |  |
|           | Same as serial no.1, but providing power point by using 2*4.00 sq.mm. PVC insulated 1100 V grade copper conductor wire with independent 1*4.0 sq.mm earth wire from D.B. to first point (Primary Point) and first to second point with 2*2.5 sq.mm. PVC insulated 1100 V grade copper conductor wire and 1*2.5 earth wire (Secondary Point). All wiring is to be provided in PVC conduit of suitable size. Each power point (Primary or Secondary) must include providing and fixing of <b>a dual socket combination of 1 no. 16 Amp 6 –pin socket with 16 Amp. switch &amp; 1 no. 6 Amp 5-pin socket with 6 Amp. switch.</b> The switches should be Modular type switch / socket / plate etc. complete assembly). |       |       |  |  |
|           | There shall be a maximum of 2 points per circuit   |       |       |  |  |
|           | NOTE: The power point, complete as mentioned above, shall be placed on the low ht. / full ht. partition above the tables / counters at a suitable place to ensure convenient accessibility for staff.  |       |       |  |  |
|           | Primary Point  | 6.00  | Nos.  |  |  |
| <b>11</b> | <b>LIGHT/FAN POINT</b>   |       |       |  |  |
|           | Supply & Installation of concealed point wiring using 600v grade 1.5 Sq.mm copper conductor PVC insulated wires (with proper R,Y,B color code ) pulled through heavy gauge PVC conduits laid concealed over false ceiling including 2 Nos. 2.5 sqmm circuit wires from the relevant DB and also including 2.5 sqmm green color copper earth wire and switch plate, switches, etc. as approved by the Bank's Engineer/Architect.  |       |       |  |  |
| <b>a.</b> | One light points controlled by one 6 amp. Modular switch.  | 8.00  | Nos.  |  |  |
| <b>b.</b> | Two light points controlled by one 6 amp. Modular switch.<br>(Cost shall include wiring of the first point from the switch board and then looping from the first point to the second point)  | 8.00  | Nos.  |  |  |
|           | Three light points controlled by one 6 amp. Modular switch.<br>(Cost shall include wiring of the first point from the switch board, then looping from the first point to the second point & further looping from the second point to the third point)  | 4.00  | Nos.  |  |  |
|           | Four light points controlled by one 6 amp. Modular switch.<br>(Cost shall include wiring of the first point from the switch board, then looping from the first point to the second point & further looping from the second point to the third point & further looping from thrid point to fourth point)  | 1.00  | Nos.  |  |  |
| <b>c.</b> | Ceiling Fan Point including the cost of 6A Switch along with 5 step electronic fan regulator.  | 3.00  | Nos.  |  |  |
| <b>d.</b> | Wall Fan Point along with 6 AMP switch   | 8.00  | Nos.  |  |  |
| <b>e.</b> | Exhaust Fan Point along with 6 AMP switch  | 3.00  | Nos.  |  |  |
| <b>f.</b> | Call Bell Point  | 1.00  | Nos.  |  |  |
| <b>12</b> | <b>DATA CABLING &amp; POINT</b>  |       |       |  |  |
| <b>a.</b> | Wiring for computer networking from I/O hub to computer workstation with Cat-6 computer cable including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type. This work includes providing PVC conduits in chases from the I/O hub to the point.  | 10.00 | Nos.  |  |  |
| <b>b.</b> | Supplying and fixing of 1 mtr long crimped patch cord  | 10.00 | Nos.  |  |  |
| <b>c.</b> | Supplying and fixing of 2 mtr long crimped patch cord  | 10.00 | Nos.  |  |  |
| <b>d.</b> | Supplying and fixing of 16U Rack complete with exhaust fan, lockable front glass door, cable managers, electrical socket board etc.  | 1.00  | Nos.  |  |  |
| <b>e.</b> | Supplying and fixing of 24 port jack panel   | 1.00  | Nos.  |  |  |
| <b>13</b> | <b>VOICE NETWORKING</b>  |       |       |  |  |
| 1.1       | Wiring for Telephone / Intercom System from Tag Block to workstations / Tables / counters / outlets with 2 pair Telephone cable including providing ferrules at both ends and termination at both ends including providing & fixing frame for <b>RJ11</b> socket with shutter, <b>RJ11</b> outlet, faceplate and mounting box complete of modular type. This work includes providing PVC conduits in chases from the tag block to the individual point.  | 6.00  | Nos.  |  |  |
| 1.2       | Supplying, laying, effecting terminations, testing and commissioning of 0.51mm dia Cu. Conductor, twisted , colour coded with polythene capor barrier, telephone cables in the existing tray or in conduit including providing &fixing conduit pipe or cable tray as required from building tag block to the floor as required.  |       |       |  |  |
| a)        | Supplying & fixing 20 pair krone tag block with enclosure.   | 6.00  | Nos.  |  |  |
| b)        | P/L 20 Pair of PVC insulated PVC sheathed multi core jelly filled armored telephone Cable  | 22.00 | Mtrs. |  |  |

|                          |  |       |       |  |  |
|--------------------------|--|-------|-------|--|--|
| <b>14</b>                | <b>FIXTURES</b>  |       |       |  |  |
|                          | Supplying, installation with hanging support , testing and commissioning of following light fixtures with electronic Ballasts, Tubes, lamps, all fixing materials including connecting wires etc. all complete as per the directions of Engineer-in-charge.(all Commercial LED Light Fixures should be covered with minimum 3 Years onsite replacement warranty) |       |       |  |  |
| <b>a.</b>                | FULL GLOW 2X2 LED 36W Ultra slim Smart Panel complete with driver of make As specified in tender document or approved by bank  | 12.00 | Nos.  |  |  |
| <b>b.</b>                | LED 18/20 watt Tube Light with all accessories.make As specified in tender document or approved by ARCHITECT OR BANK   | 8.00  | Nos.  |  |  |
| <b>c.</b>                | Supplying , fixing ,testing and commissioning of 15 W LED commercial type down lighter of make As specified in tender document or approved by ARCHITECT OR BANK  | 12.00 | Nos.  |  |  |
|                          | LED Strip having lighting 15W per 5 M with driver and necessary installation fittings Led strip light (5mtr.) make As specified in tender document or approved by ARCHITECT OR BANK  | 0.00  | R.Mt. |  |  |
|                          | ENDURA LIGHT SQ SWIVEL - 3 W LED commercial type Spot lighter of make As specified in tender document or approved by ARCHITECT OR BANK   | 0.00  | Nos.  |  |  |
|                          | LED Profile Light with aluminium cover & PVC cover length for cove lighting 15W per 5 M with driver and necessary installation fittings Led strip light (5mtr.) make As specified in tender document or approved by ARCHITECT OR BANK  | 0.00  | R.Mt. |  |  |
|                          | LED Focus Light - 10 W LED commercial type Focus lighter of make As specified in tender document or approved by ARCHITECT OR BANK  | 0.00  | Nos.  |  |  |
| <b>d.</b>                | Wall mounted fans 450 mm dia. make as specified in tender document or approved by ARCHITECT OR BANK  | 8.00  | Nos.  |  |  |
| <b>e.</b>                | Supply &fixing of Ceiling fans 1200 mm double ball bearing make As specified in tender document or approved by ARCHITECT OR BANK with required down rod and hanging arrangement  | 3.00  | Nos.  |  |  |
| <b>f.</b>                | Supply & fixing of 230 mm exhaust fan 'Ventilair DX W' with self closing louvers and plastic body with all accessories etc. complete of make As specified in tender document or approved by ARCHITECT OR BANK  | 3.00  | Nos.  |  |  |
| <b>GRAND TOTAL (Rs.)</b> |  |       |       |  |  |