

**BOQ FOR ELECTRICAL AND LAN WORKS AT WARANGAL MAIN BRANCH & ATM**

**ELECTRICAL WORKS**

S.no	Item description	Qty	Rate	PER	Amount
<b>1</b>	<b>FIXTURES:</b> Installation, Testing & Commissioning of the following Lighting Luminaries with necessary fixing accessories. (Philips/ Havells / Crompton Greaves/Wipro Make.)				
a	1 x 20W- T8 1200mm LED tube.	12		no	
b	LED light fittings (36 W) of 2 x 2 Square LED Recessed Panel Light type. (Philips- RC375B LED28S-6500 Model or equivalent)	26		no	
c	LED mini down light fittings (13 W) of round type. - DN135B LED10S/840 PSU II WH or equivalent) (Philips)	16		no	
d	LED micro down light fittings (8 W) of round type.	18		no	
e	1200 mm sweep Ceiling fan. CG/ Almonard make	8		no	
f	450 mm sweep Wall mounted fans with <b>mettalic/ SS body &amp; blade</b> - CG/ Almonard/Havells make	20		no	
g	Light duty ordinary 225mm sweep Exhaust fan for Toilets( 9") - CG/ Almonard/Havells make	2		no	
h	Heavy duty 300mm sweep exhaust fan for UPS Room (12") - CG/ Almonard/Havells make	1		no	
<b>2</b>	<b>MAIN DB: (Legrand/Schneider/L&amp;T Make)</b> Supply & fixing of surface/flush mount, CRCA sheet steel metal distribution board with vertical bus bar for TPN 6 way supply distribution with 125A FP MCCB -1no as incomer & outgoing consisting of 4 nos of 63A TP MCBs for total distribution system with Bus-bar rating of 125A with short time withstand rating of 10kA for 1 sec with 0- 500V voltmeter with selector switch and R, Y, B Phase indicating lamps. (Provide labeling in DB)	1		no	
<b>3</b>	<b>LIGHTING DB: (Legrand/Schneider/L&amp;T Make)</b> Supply & fixing of 4way TPN MCB distribution board with metallic door having 1no 63A FP MCB as incomer & outgoing consisting of 12nos of 10/16A SPMCBs for lighting distribution system. (Provide labeling in DB) <b>NOTE:</b> The Electrical Wiring inside the Strong Room should be in a CONDUIT and POWER CUT OFF SYSTEM either AUTO / MANUAL PLUG SYSTEM drawing power only from the Limit Switch in case of "Auto Power Cut Off System" is provided in the Door OR from the FEEDER BOX fitted outside the Strong Room (near the door) in case of Manual Plug System. The MANUAL PLUG SYSTEM OF POWER CUT OFF should be such that the connecting cable passes through the Strong Room Defender Door from inside to outside, which should be accessible only after opening the S.R. door (thus ensuring that the door can not be closed without removing the plug + wire and hence total power inside the Strong Room is cut off leaving no chances of fire resulting from an Electrical source / High Voltage / Surging even with the Switches in Off position)	1		no	
<b>4</b>	<b>UPS DB: (Legrand/Schneider/L&amp;T Make)</b> Supply & fixing of 4way TPN MCB distribution board with metallic door having 63A FP MCB as incomer & outgoing consisting of 3 Nos of 40 Amps DP MCBs <b>(2 UPS &amp; 1stabilizer I/P)</b> (Provide labeling in DB)	1		no	
b	Supply & fixing of 40 Amps DP MCB with metal enclosure for the <b>UPS O/P.</b>	1		no	
<b>5</b>	<b>UPS SUB DB: (Legrand/Schneider/L&amp;T Make)</b> Supply & fixing of 12 way SPN distribution board with metallic door having 1no 40A DP MCB, 6nos of 6/10A SP MCBs for the UPS distribution system. (Provide labeling in DB)	2		no	
<b>6</b>	<b>INVERTER DB: (Legrand/Schneider/L&amp;T Make)</b> a Supply & fixing of 20 Amps DP MCB with metal enclosure for <b>INVERTER</b> incoming and outgoing with 15 Amps socket (Anchor/Schneider Make).	1		no	
b	Supply & fixing of 6way SPN distribution board with metallic door having 8 nos of 6/10A SP MCBs for the Inverter distribution system. (Provide labeling in DB) (Only for necessary light and fan loads)(Separate POWER CUT OFF SYSTEM to be provided for strong room wiring of light points connected to inverter circuit)	2		no	
<b>7</b>	<b>AC DB: (Legrand/Schneider/L&amp;T Make)</b> a Supply an fixing of 16 way SPN DB with metallic door having 63 Amps 4 pole MCB -1 no and out going consisting of 2 no's 32 amps TP MCB and 7 no 20 amps SP MCB for AC Distrubution	1		no	
b	SITC OF 20Amps 3 Pin single phase 230 volts industrial plug and socket controlled by 25/32 Amps DP MCB in MS enclosure for feeding power to AC units.	6		no	
c	Supply & fixing of 20/32 Amps FP MCB with metal enclosure for AC's	6		no	
<b>8</b>	<b>WIRING: (Finolex/Havells/ Poly Cab Make)</b> Supply, Laying and Dressing of 1.1 KV grade PVC insulated copper wire (FRLS) through suitable PVC conduit pipe concealed / open in wall. Rate should include suitable MS clamp, Spacing and inclusive of termination with crimping type sockets, bolts, washers, etc. Wiring should be done, so that no pipe/wire is visible in banking hall. <b>Raw power line and UPS power line should be in separate conduit pipe arrangement.</b>				
a	4R 4 sq. mm. + 2R 2.5 sq. mm. PVC insulated Copper wire ( <b>Main Power DB to LDB</b> ).	34		Mtr	
b	2R 2.5 sq. mm + 1R 1.5 sq. mm PVC insulated Copper wire ( <b>LDB to first point (or) switch box</b> ). (Lighting Circuit Wiring).	103		Mtr	
c	4R 6 sq. mm. + 1 R2.5 sq. mm. PVC insulated Copper wire ( <b>Main Power panel to UPS input DB</b> ).	34		Mtr	

d	2R 6 sq. mm. + 1R 1.5 sq. mm. PVC insulated Copper wire (UPS input DB to UPS + UPS to UPS output MCB) (UPS MCB to UPS output DB and Main Panel to Raw power DB)	51		Mtr	
e	2R 2.5 sq. mm. + 1R 1.5 sq. mm. PVC insulated Copper wire (UPS & RAW Power Circuits). Maximum 2 Points only in 1 Circuit.	186		Mtr	
f	4R 10 sq. mm PVC insulated Copper wire (Main Power Panel to A/C DB).	27		Mtr	
g	2R 4sq. mm. + 1R 1.5sq. Mm. PVC insulated Copper wire (AC DB to AC units).	72		Mtr	
h	2R 6 sq. mm. + 1R 2.5 sq. mm. PVC insulated Copper wire (Main DB to INVERTER DB and then to LDB).	61		Mtr	
i	Providing and placing in position, testing and connecting 1.1 KV grade XLPE insulated PVC sheathed armoured Aluminium cable 3&1/2C x 35 sq. mm. conforming to IS 7098 with 2 Nos 10 SWG GI ECC by GI bar and saddles on wall/floorpass. Cable to be from Supply to Main DB.	24		Mtr	
<b>9 WIRING FOR NAME BOARD:</b> (Finolex/Havells/ Poly Cab Make)					
a	Supply and laying of 3run 2.5 sq. mm. PVC copper wire through 20mm PVC conduit pipe with all accessories from LDB to Name Board.	32		Mtr	
<b>10 LIGHT POINT WIRING:</b> (Switch- Anchor/Schneider/Legrand Make) (Wiring-Finolex/Havells/ Poly Cab Make)					
	Supply and wiring for light point/Exhaust fan point /6A Socket outlet points wiring by using 2R 1.5 sq mm. + 1R 1sq mm. PVC insulated copper wire (FRLS) in a 20mm dia PVC Conduit with conduit accessories and suitable fixing arrangement. The conduit should be laid concealed in wall/floor. The Rate (Rs.) should be including supply and fixing of Nichel cadmium plated M.S box, 5 A one way modular plate switch with necessary connections and surface / recessed fixing arrangement).				
a	1 light point controlled by 1 switch	36		no	
b	2 light points controlled by 1 switch	8		no	
c	3 light points controlled by 1switch	4		no	
d	6A 2P socket with 6A switch away from socket and in switch box for Wall Mounting type Fans.	12		no	
e	Exhaust Fan ponit with 6A Switch away from point in switch box	3		no	
f	Ceiling fan point with electronic regulator	6		no	
g	5A socket with 5A switch in switch board itself	5		no	
<b>11 UPS POWER POINTS:</b>					
a	Supply & fixing of modular type boards for Computer points with 3nos. of 5Amps sockets, 1no. of 15Amps switch with indicator,suitable plate , box including terminations complete as required. (For Counter & Manager Cabin)	20		no	
b	Supply and providing of UPS power point consisting of 1 no.6/16A Socket + 1 no. 16A switch, for Hub connection/CCTV System/cash cabin/Fire Alarm.	4		no	
	<b>NOTE:</b> The complete alarm systems and CCTV systems power connections must be taken before the output MCB of the UPS connection to ensure continuous power supply to the security systems. separate MCB to be provided near CCTV Fire Alarm System power points.				
<b>12 RAW POWER POINTS:</b>					
a	Supply and providing of Raw Power Points comprising of 2 no. 6A 3p socket + 1 no. 6/16A socket (Flush type) with1 no. 16A switch in suitable box, with all accessories, for Counters.	20		no	
<b>13 TELEPHONE POINT WIRING:</b>					
a	Supply , fixing , testing of phone point with suitable GI boxes with RJ-11 Telephone socket complete in all respect.	5		no	
b	Supply and providing of mettalic telephone junction box with 10 pair crown mounted on wall with all accessories.	1		no	
c	Supply and Laying of Telephone 2 pair cable through PVC conduit pipe with all accessories .	30		Mtr	
d	Supply and laying of Telephone 5 pair cable through PVC conduit pipe with all accessories (from Telephone pole to Mgr cabin)	25		Mtr	
<b>14 EARTHING:</b>					
a	Supply & preparation of Earth pit as per IS: 3043 standards with copper plate earthing using 600x600x3 mm thick tinned copper plate including 25x3mm copper flat, 25mm dia G.I. Pipe with funnel, charcoal, salt complete as required with masonry bricks chamber covered with CI cover etc.	1		no	
b	Supply & preparation of Earth pit as per IS:3043 standards with 40mm GI pipe with funnel, charcoal, salt complete as required with masonry bricks chamber covered with CI cover etc.	1		no	
c	Supply & laying of 8SWG Copper wire for earthing in pvc pipe from earth pit to distribution board.	32		Mtr	
d	Supply and Laying No. 10 sq mm Copper wire for UPS neutral earth in PVC conduit.	32		Mtr	
15	Supply & fixing 100 A Bus Bar Unit	1		no	
16	Supply, laying, fixing & Testing of Calling Bell with all aecessories, wiring and bell push. (Manager Cabin & Discussion Room)	1		no	
17	Temporay Arrangement for functioning of branch during renovation along with minimum wiring, network point and sufficient lighting points etc.	1		LS	
<b>Total Electrical works</b>					

<b>DATA CABLING WORKS</b>					
<b>S.no.</b>	<b>Item description</b>	<b>Qty</b>		<b>PER</b>	<b>Amount</b>
1	Supply & laying of lane cabling to the all tables with cat 6 UTP(D Link Make)cable run through PVC pipe including necessary clamps screws concealed in wall where ever necessary. <b>The data cabling pipe should be laid at a minimum distance of 3 ft from pipes laid down for power distribution.</b>	180		Mtr	
2	Supply and Fixing of Cat -6 information outlets with face plate & block mount box	22		no	
3	Supply and fixing of 7 feet patch cards with end clips	22		no	
4	Supply and fixing of 3 feet patch cards with end clips	22		no	
5	Flexible pipe 1"	25		Mtr	
6	Providing and fixing 24 port jack panel for CAT-6 D-Link make	1		LS	
7	Supply & fixing of Modem Rack as per requirement with all accessories	1		LS	
<b>SERVICE CHARGES</b>					
1	Lying of Cat-6 UTP cable (D-link make)	183		Mtr	
2	Cat-6 information outlet box fixing	22		no	
3	24 port switch with related item fixing	1		LS	
4	Back box & Case plate fixing	22		no	
5	Casing & Capping fixing with suitable material	66		Mtr	
6	PVC pipe fixing with raw material/screws/GI saddles/grips	1		LS	
7	Total ports testing	1		LS	
<b>Total Data Cabling works</b>					
<b>ATM ELECTRICAL &amp; DATA CABLING</b>					
<b>Total Electrical and Data Cabling (Estimated Amount)</b>					