

**B.O.Q OF ELECTRICAL WORK FOR INDIAN BANK BERHAMPUR BRANCH .**

SL.N O.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE	AMOUNT
	<b>1.1 ELECTRICAL WIRING WORK</b>				
1.0	Ressed / surface light point / fan point / call bell point etc. wiring using 1100V <b>FRLS grade 3R</b> (P+N+E) x 1.5 Sq.mm FRLS multi stranded copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through rigid <b>FR/FRLS</b> PVC conduits of 20mm Dia 1.5 mm thick laid concealed over false ceiling or in wall chases or on the ceiling in case of an open ceiling, with modular type switch plate, switches, GI concealed back box, etc. of legrand mylinc or equivalent make. S.I.T.C.( Supply Installation Testing And Commissioning) as directed by the Engineer-in-charge. (Each circuit shall not feed more than 8 points OR				
	NOTE:- 1. Only FRLS wire shall be used; 2. The wires from ceiling junction to light points / light fixture shall be drawn in flexible PVC conduit with adptor & cover for junction box & crimp type lugs at both the ends alongwith necessary hardware & accessories, etc. as required; 4. Looping of Neutral / Earth wire between two seperate Primary / Full Points is strictly not allowed; 5. Looping of Neutral / Earth wire between two seperate circuits on similar or other phase is strictly not allowed; 6. Ferulling / numbering / tagging to wires with circuit number & db name for all lighting & raw / ups power shall be strictly followed at both DB & switch				
1.1	Primary light points including the cost of clip in type 6A Modular switch of legrand mylinc or equivalent make. S.I.T.C. as directed by the Engineer-in-charge.( 1 light/fan controlled by one switch)	<b>Nos.</b>	<b>35.00</b>		
1.2	Subsequent point ( Looped From Primary)	<b>Nos</b>	<b>20.00</b>		
1.3	Independent point using one 6 Amp Modular Switch and one 6 Amp, 2/3 pin Modular scoket mounted on a sutable size Box for wall fans.	<b>Nos</b>	<b>11.00</b>		
1.4	6 Amp 2/3 pin Modular scoke with 6A Modular switch. ( on common switch Board.)	<b>Nos.</b>	<b>4.00</b>		
1.5	Primary light points including the cost of clip in type 6A Modular switch of legrand mylinc or equivalent make & model as approved by project in charge. ( I light controlled by one switch UPS point )	<b>Nos.</b>	<b>3.00</b>		

SL.N O.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE	AMOUNT
2.0	Power point using 16 Amp 3 Pin plug socket with 16 Amp Modular switch of legrand mylinec or equivalent make mounted on separate board using suitable size galvanized iron junction & switch boxes & clip in type modular type switch plate,etc. Supply taken from Nearest L.D.B. The point should not taken from any switch Board. S.I.T.C. as directed by the Engineer-in-charge.	Nos	2.00		
3.0	Raw power point using 6 Amp, 2/3 Pin Modular plug socket with 6 Amp Modular switch of legrand mylinec or equivalent make on separate board using galvanized iron junction & switch boxes & clip in type modular type switch plate, switches, GI/PVC concealed back box, etc. Supply taken from Nearest L.D.B. Maximun 3 Points per Circuit for counter & Table	Nos	8.00		
4.0	Supply,installation and testing of timer with contactor ( L&T / Legrand ) make controlling the glowsign board with all accessories complete enclosed in Powder coated metal box as required as per direction of Engineer in charge. The system will be apart of the panel board.	Nos.	1.00		
5.0	Supply of all required materials and wiring to circuits/ submains with following number and sizes of PVC insulated 1100 volt grade multi standard <b>FRLS</b> copper wire run inside rigid <b>FR/FRLS</b> PVC conduits of 20mm Dia 1.5 mm thick of ISI mark as required and copper wire as earth continuity conductor and complete in all respect including making good to all damages caused and as per the direction of Consultant and Engineer-in-charge.				
5.1	Ressed / surface conduit wiring with ( 2Rx2.5sqmm +1Rx1.5sqmm) copper wire ( LDB to Common Switch board and Points)	Mts	220.00		
5.2	Ressed / surface conduit wiring with ( 2Rx6.0 sqmm +1Rx4.0 sqmm copper wire ( PANEL to L.D.B./ U.P.S. input.)	Mts	60.00		

SL.N O.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE	AMOUNT
	<b>1.2 COMPUTER WIRING WORK</b>				
1.0	Supply and fixing of concealed UPS power points using 1 nos. of 16 Amp, 3 Pin Modular switches to be provided on table top + 4 nos. 6 Amp Modular socket below table top of legrand myline or equivalent make taken from Nearest C.D.B with suitable size galvanized iron/PVC junction & switch boxes & clip in type modular type switch plate, GI/PVC concealed back box, etc. Maximum 3 Points per Circuit for counter & Table. S.I.T.C. as directed by the Engineer-in-charge.	SET	9.00		
2.0	Supply and fixing of concealed UPS power points using clip in modular type 5 No. of 6/16 amp socket points controlled by 2 No of 16 amp modular switch with indicator of legrand myline or equivalent make taken from Nearest C.D.B with galvanized iron junction & switch boxes & clip in type modular type switch plate, switches, GI concealed black box, etc. . The point should not from any switch Board S.I.T.C. as directed by the Engineer-in-charge	SET	1.00		
3.0	Supply of all required materials and wiring to circuits/ submains with following number and sizes of PVC insulated 1100V FRLS grade 3R (P+N+E) x following size <b>FRLS</b> multi stranded copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through rigid <b>FR/FRLS PVC conduits</b> of 20mm Dia 1.5 mm thick ISI mark laid concealed over false ceiling or in wall chases or on the ceiling in case of an open ceiling including of as required and multi stranded copper wire of following size as earth continuity conductor and complete in all respect including making good to all damages caused and as per the				
3.1	Resessed / surface conduit wiring with ( 2Rx2.5sqmm +1Rx1.5sqmm) copper wire ( C.D.B. to Computer Points )	Mts	170.00		
3.2	Resessed / surface conduit wiring with ( 2Rx4.0 sqmm +1Rx2.5sqmm) copper wire ( U.P.S. OUTPUT to C.D.B. )	Mts	30.00		

SL.N O.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE	AMOUNT
	<b>1.3 A.C. WIRING WORK</b>				
1.0	Supply of all required materials and wiring to 2 nos of Split AC in System Room with 2 nos 16 Amp Modular socket of legrand mylinec or equivalent make mouted on suitable size GI concealed Box controlled by 25 Amp Digital timer operated Alternately supplied by a 25 Amp RCBO Sensivity 30mA Enclosed in 6 way SPN DB of Legrand or Equivalent make taken from Nearest M.L.D.B. with galvanized iron junction & switch boxes & clip in type modular type switch plate, switches, GI concealed back box, etc. .The point should not taken from any switch Board. <del>S.I.T.C. as directed by the Engineer-in-charge</del>	<b>Nos.</b>	<b>1.00</b>		
2.0	Supply & Installation of all required materials and wiring to Split AC 25 Amp 3 Pin Modulat socket mouted on suitable size concealed GI Box near to the AC controlled by 25 Amp DP isolator Enclosed in Powder coated DP Encloser of Legrand Ekinox3 model or Equivalent make taken from Nearest A.C..D.B/ M.L.D.B. with galvanized iron junction & switch boxes & clip in type modular type switch plate, switches, GI concealed back box, etc. of legrand mylinec or equivalent make.The point should not taken from any switch Board <del>S.I.T.C. as directed by the Engineer-in-charge</del>	<b>Nos.</b>	<b>5.00</b>		
3.0	Supply and Installation of all required materials and wiring to circuits/ submains with following number and sizes of PVC insulated 1100 volt grade standard <b>FRLS</b> copper wire run through rigid <b>FR/FRLS PVC</b> conduits of 20mm Dia 1.5 mm thick ISI mark as required and copper wire as earth continuity conductor and complete in all respect including making good to all damages caused and as per the direction of <b>Consultant and Engineer-in-charge</b> .				
3.1	Resseded / surface conduit wiring with 2 X 4sq. mm + 1 X 2.5sqmm copper wire (From Panel to Split A.C. points)	<b>Mts</b>	<b>135.00</b>		

SL.N O.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE	AMOUNT
	<b>2.PANEL BOARD &amp; DISTRIBUTION BOARDS.</b>				
1.0	<b>Main Panel Board</b>	<b>Set</b>	<b>1.00</b>		
	Supply, delivery, installation , testing , commissioning , of L&T indoor wall ,floor , mounted , type distribution boards made out of 2 mm thk. CR sheet metal duely acid treated premised & painted with 2 coats of enamel paint compartment arrangement for each equipment & bus bar chamber on the top of the panel running horizontal through out its length duly lamp , vermin proof having provision cable by conduit entry , earthling stud as per specification mentioned below duly factory wired confirming to the relevant ISS & as per special condition of contract , making good the damages M.S. Cubical type Panel board should have hinged door at the front. The panel shall be provided with all accessories & following arrangements complete in all respect & direction of EIC (before fabrication of panel				
	Incoming-				
	<b>1No 100A- 25KA - 4POLE -MCCB.</b>				
	1 set of 125A TPN copper bus bar				
	1No 63A- 18KA - 4POLE -MCCB.				
	1 set of 100A TPN copper bus bar				
	63A, 4-POLE Change over				
	1 set of 100 A TPN copper bus bar				
	Out going-				
	<b>1No 25KA - 32A TPN SPD</b>				
	1 Nos 40A, 4P MCB, for U.P.S.				
	1 Nos 40A, 4P MCB, Spare				
	5 Nos 25 A DP MCB for 1.5 ton Split A.C.				
	2 Nos 25 A DP MCB Spare				
	1 Nos 20 A DP MCB for 1.0 ton Split A.C.				
	1 Nos 20 A DP MCB Spare				
	1 Nos 32 A DP MCB for L.D.B.				
	1 Nos 32 A DP MCB for A.T.M.				
	1 Nos 25 A DP MCB for Glow sign board & Outer Lighting				
	1 Nos 25 A DP MCB Spare				
	2 Nos 32 A DP MCB Spare				
	1No. VAF Digital meter with (100/5A)CT.				
	Cable tray.				
	Termination bar for each out put				
	6 Nos Phase indicator lamps				
2.0	Supplying & Fixing 100 Amp Wireable IC Cutout - 3nos in MS enclouser withj lock & key arrangements.	<b>Set</b>	<b>1.00</b>		

SL.N O.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE	AMOUNT
3.0	Supply and installation of SPN, Double Door, Metal type, (hager IP43, legrand make Ekinox3 model or equivalent make as approved by SBIIMS), surface / flush mounted on wall, interconnected wiring complete with earthing lugs, including DB wiring, termination of circuits with ping type copper lugs, blank plates, etc. housing following switchgears				
3.1	<b>L.D.B (Light Distribution Board)</b>	<b>Set</b>	<b>1.00</b>		
	12 way SPN DB				
	Incoming :- 1 No. 32A DP MCB				
	Outgoing :- 10 No. 6-10 A SP MCB				
	All MCB must be class C Type				
3.2	<b>C.D.B (Computer Distribution Board)</b>	<b>SET</b>	<b>1.00</b>		
	12 way SPN DB				
	Incoming :- 1 No. 32A DP MCB				
	Outgoing :- 10 No. 6-10 A SP MCB				
	All MCB must be class C Type				
3.3	<b>U.P.S Incoming DB</b>	<b>SET</b>	<b>1.00</b>		
	4 way SPN DB				
	40 Amp DP-10 kA - MCB – 2 nos (1main & 1 spare).				
	All MCB must be class C Type				
3.4	<b>U.P.S Outgoing DB</b>	<b>SET</b>	<b>1.00</b>		
	4 way SPN DB				
	40 Amp DP-10 kA - MCB – 2 nos (1main & 1 spare).				
	All MCB must be class C Type				

SL.N O.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE	AMOUNT
	<b>3. FITTINGS OF FIXTURES</b>				
	(NOTE : ANY OF FIXTURES AND FITINGS SHALL BE RE-CONFIRMED WITH THE ARCHITECTS / CONSULTANTS BEFORE ORDERING THEM.				
	Supply , Installation, testing and commissioning of lighting fixtures with lamps and LED driver as per the details below including necessary hardware such as clamps, nuts, bolts, nails, screws and suspension rods as required for fixing the fixtures in position as directed by architect / consultant / client including supply and fixing flexible wires from holder to fixtures hardwares etc. Note :- All Light Fixtures, Fans, Exhaust Fans & other fittings samples shall be approved by the Client / Architect / Consultant before placing order to the Light Fixture Vendor / Supplier makes are specified. Client / Architect / Consultant reserves right to approve / select final Light Fixtures from				
1.0	Supply,installation and testing of recess LED lights fittings ( 31 - 34 W) of square type ( 2'-0"x2'-0") with all accessories complete of Crompton LCTRLN-36-FO-CDL Equivalent Make as required as per direction of Engineer in charge	Nos.	11.00		
2.0	Supply,installation and testing of recess LED lights fittings ( 12W) of spot type all accessories complete of Crompton LSCRM-12W-CDL/NW/WW or Equivalent Make as required as per direction of Engineer in charge	Nos.	21.00		
3.0	Supply,installation and testing of recess LED lights fittings (18W) of square type with all accessories complete Crompton LSDN-18-CDL/TL/WW Equivalent Make as required as per direction of Engineer in charge	Nos.	2.00		
4.0	Supply,installation and testing of Round surface LED lights fittings ( 12W) of spot type all accessories complete of Crompton LCDSPLN-R-12-CDL or Equivalent Make as required as per direction of Engineer in charge.	Nos.	2.00		
5.0	Providing and fitting of 400 mm sweep cabin fan of Orient/ Crompton Equivalent Make as required as per direction of Engineer in charge.	Nos.	1.00		
6.0	Providing and fitting of 450 mm sweep Wall fan of approved make .	Nos.	10.00		
7.0	Providing and fitting of 9" sweep heavy duty Exhaust of Orient/ Crompton Equivalent Make as required as per direction of Engineer in charge.	Nos.	5.00		
8.0	Providing and fitting of 1200 mm sweep ceiling fan of Orient/ Crompton High Speed Equivalent Make as required as per direction of Engineer in charge.	Nos.	2.00		
9.0	Providing and fitting of modular fan step Type regulator of approved make .	Nos.	2.00		
10.0	Supply & fixing of fan-hook,by cutting roof slab and welding 10 mm dia.Fan hook with main reinforcement of roof slab complete in all respect	Nos.	2.00		
11.0	Supplying , fixing of 1x 20W LED Batten lights fittings with all accessories complete of Philips BN021C LED20S PSU CDL/NW GR Equivalent Make as required as per direction of Engineer in charge	Nos.	7.00		
12.0	Providing and fitting of call bell Remote Controlled with Battery of approved make .	Nos.	1.00		
13.0	Supply,installation and testing of LED light fittings (1x9w) with angle holder of Philips/ Crompton/ Syska or equivalent as required as per direction of Engineer in charge.	Nos	6.00		

SL.N O.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE	AMOUNT
<b>4. EARTHING</b>					
1.0	Providing and fixing Earthing with G.I. earth plate 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required. For Main Panel Board	Nos.	2.00		
2.0	Providing and fixing of Earthing with copper earth plate 600 mm X 600 mm X 3.18 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required. For UPS.	SET	1.00		
3.0	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	Mts	40.00		
4.0	Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required	Mts.	3.00		
5.0	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing as required.	Mts.	20.00		
<b>5.DATA / TELEPHONE WAIRING</b>					
1.0	Supply of all required materials and laying of CAT-6 LAN wiring from server to Hub and Hub to computer I/O Points of approved brand (D-Link/Digilink/Amps ) laid through rigid FR/FRLS PVC conduits of 20mm Dia 1.5 mm thick of ISI mark duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. complete as in all respect including making good to all damages caused and as per the direction of Consultant and Engineer in charge	Mts	280.00		
2.0	Supply of all required materials & laying 2 pairs 0.51 cross section telephone wires of ITI approved laid through rigid FR/FRLS PVC conduits of 20mm Dia 1.5 mm thick of ISI	Mtrs.	60.00		
3.0	Supply , fixing of RJ 45 information outlet (I/O) with safety sutter of D-link make with front modular cover plate, flush box metallic or PVC for trucking system etc.	Nos.	10.00		
4.0	Supply , fixing , testing of RJ11 Modular Telephone socket point with suitable GI boxes complete in all respect as per direction of EIC .	Nos.	4.00		
5.0	Supply & fixing 9" 9 U wall mounted modem rack with power distribution box, cable manager, cantilever self, fan & mounting kit etc all complete. ( Make Valrack, Comrack,	Set	1.00		
6.0	Supply & fixing 24 port PATCH PANEL ( Make D-LINK, AMP, HCL )	No	1.00		
7.0	Supply and fixing 24 port - 10/100/1000 mbps- L2 unmanaged switch with 2SFP port. (Giga switch) of ( Cisco / D-link / Zyxel/ HP )	Nos.	1.00		
8.0	Supply & fixing 1Mtr long E-CAT 6 PATCH Cord (Make D-LINK,AMP or Equivalent Make)	No.	10.00		
9.0	Supply & fixing 2Mtr long E-CAT 6 PATCH Cord (Make D-LINK,AMP or Equivalent Make)	No.	10.00		
<b>TOTAL</b>				<b>Rs.</b>	

**Total Amount In Words:-**