

**BILLS OF QUANTITIES FOR ELECTRIFICATION WORK OF INDIAN BANK
AT BAREJA BRANCH.**

Sr. No.	Description	Quantity	Rate	Unit	Amount
[A] ELECTRIFICATION WORK FOR BRANCH					
1	Supply installation testing and commissioning of Elect. Power IP42 Protection distribution boards of 18 G CRCA sheet steel mounted on angle iron frame grouted on wall, complete with copper busbars for phase neutral and earth DIN rails for MCB/ELCB and connector, terminal blocks mounting, dully wired with suitable size PVC insulated copper wire, terminations with lugs and chrome plated brass compression glands for incoming and out going wires and cable as under.				
[a]	TPN, MCB DB Double Door for UPS. Input Incoming 63 A 4 - Pole MCB-1 No Outgoing 2 Pole RCCB 100 mA sensitivity 32 A - 3 Nos. 2 Pole 10 KA MCB 25 A - 3 Nos.	1		NO	
[b]	SPN MCB DB Double Door for computer. Incoming 40 A DP MCB change over -1 No. Outgoing 10 A SP MCB - 6 Nos.	1		NO	
[c]	TPN MCB DB for A. C and Lighting as part of Main panel Incoming 63 A 4 Pole RCCB 100 mA sensitivity - 1 No. Outgoing 25 A SP MCB G 10 KA - 4 Nos. 10 A SP MCB 10 KA - 8 Nos.	1		NO	
[d]	UPS Out put DB 2 Pole 10 KA MCB 40 A - 3 Nos in One encluser	1		NO	

Sr. No.	Description	Quantity	Rate	Unit	Amount
2	Supply intallation testing and commissioning of power contro,l panel cubicle type made of 16 G sheet steel painted by seven tank method and powder coated, pedestal mounting type having cable alley and switchgears under. Incoming 1 No. 100 A TPN SFU with 100 A HRC fuses, siemens L&T make with front operating handle. 100 A copper bus bars TPN & E. Indicating lamps - RYB Digital Volt meter, Ammeter , Frequency (VAH meter) Load manager meter with select switch inbuilt with set of CTs control fuses Outgoing 63A 4 Pole MCB-1 No 63 A TPN MCB-G -1 No. 10 A DP MCB-L -3 Nos. 40 A 4-pole MCB -2 No	1		NO	
3	Supply and installation of 415 V, 125 A TPN SFU with 100 A HRC fuses, on angle iron frame grouted on wall.	1		NO	
4	Supply and installation of stranded alluminium conductor. XLPE Insulated IS approved and marked sheathed and insulated 1.1 KV grade armoured cable on wall with saddles on 20 x 3 mm M.S strips gourted on wall, spaced one mt.				
[a]	- Do - but 3.5 x 35 Sq.mm Aluminium cable.	35		RMT	
[b]	- Do - but 4 x 10 Sq.mm Aluminium cable.	35		RMT	
5	Cable end terminations of aluluminium armoured cable, with compression type cable gladns and lugs.				
[a]	- Do - but 3.50 x 35 Sq.mm Aluminium cable.	2		NO	
[b]	- Do - but 4 x 10 Sq.mm Aluminium cable.	2		NO	
6	Providing circuit wiring of following sizes of PVC insulated 650 V Gd. Stranded copper conductor flexible type wires in 1.5 mm thick MMS rigid PVC pipes, 25 mm/20mm dia including terminal junction box and installing pipe with saddles spaced 60 cm and making connection with lugs. FIA FRLS wires and FIA pipes ISI marked to be used.				
Note: Use Black for Neutral and Green for Earth					
[a]	2 Nos. of 2.5 Sq.mm and 1 No. of 1.5 Sq.mm for earth PVC insulated wires including making connections.	15		RMT	
[b]	2 Nos. of 6 Sq.mm and 1 No. of 2.5 Sq.mm for eath PVC insualted copper wires. Including making connections	16		RMT	

Sr. No.	Description	Quantity	Rate	Unit	Amount
7	Providing, installing testing and commissioning of 1.5 mm thick MMS ISI marked rigid PVC pipe for wiring, on wall, roof ceiling under floor with suitable saddles spaced 60 cm including inserting the existing hanging wires and making reconnections with suitable lugs or thimbles of following sizes. FIA FRLS ISI marked.MMS conduits				
[a]	25 mm dia.	35		RMT	
8	Supply and installing GI earth strip and wires and making connections with panels, switch, equipment etc. Stranded insulated wire not to be used for body earthing. Earthing should be visible without any joint. Use Lead washers at strip joints and terminations.				
[a]	G. I. Wire 8 SWG	35		RMT	
[b]	8 SWG bare copper wire.	50		RMT	
9	Providing, installing, testing and commissioning funnel type plate earthing with all necessary materials is &I Nut bolts, washers, clamps, 1" dia PVC watering pipe with plug earth strip connected to the earth electrode, protection GI pipe etc. as per IS code without brick masonry chamber.				
	Note:Please show the earth pit and earthing Electrode before installation				
[a]	Copper plate earthing 600 x 600 x 3.15 mm plate earthing.	1		NO	
[b]	600 x 600 x 5 mm GI plate earthing.	1		NO	
[c]	Providing brick masonry chamber as per IS code with M.S framed and hinged cover for earth electrode.	2		NO	
10	<u>GENERAL POINT WIRING</u>				
	Providing, commissioning point wiring (Light point, plug point, monitor power plug point etc.) in PVC FRLS rigid conduit pipe 1.5 mm thick (Concealed) system or on slab/wall, false ceiling running open in counter in top and bottom and partition by using 650/1100 Volt grade P.V.C insulated copper wire with I.S.I approved of 1.5 Sq.mm along with PVC insulated FRLS 1.5 Sq.mm copper earth wire for light, fan, 5A socket point and 4.0 Sq.mm (Also with 2.5 Sq.mm PVC insulated copper earthing wire) for 15 Amp point with colour code system as per I.E Rules/Regulations. All the wires to be drawn in rigid PVC conduit pipe of 1.5 mm thickness MMS 20/25/32mm dia size with all necessary accessories such as bends, Junction box etc. 18 Gauge M.S switch boxes shall be used.				

Sr. No.	Description	Quantity	Rate	Unit	Amount
	<p>The top cover of the switch box shall be 3mm thick hylam plate type. The switch box size shall suitable to contain 5 Amp/15 Amp switches. 5/15 Amp socket outlet. M.S ready made junction boxes shall be permitted in pipe laying. All the pipes shall be fixed with G.I sadles clamps and wherever required to be embeded in wall. The point wiring shall mean the wiring from switch board to outlet box by including supply of 5/15 A SP control swich ceiling rose/lamp holder, 5A/15A socket 5/6 pin type. Modular switch, socket, plug, M.S box and plate cover to be used. FIA FRLS wires and FIA FRLS pipes, ISI marked to be used.Use Moduler MS Box for flush mounting and Moduler moulded box for surface mounting 15/16A switches to be with indicator</p> <p>The point wiring will include circuit wiring 2 x 2.5 sqmm + 1 x 1.5 sqmm for earth from MCB DB to lighting switch board and switch board to switch board. The no. of points will be limited to 8 point per circuit. No extra rate shall be paid for any circuit and subcircuit mains. Earth and Neutral wires should be take from the correspondng Lighting switch. Board</p> <p>The wiring is to be concealed type which includes cutting of groove in wall or floor laying conduit, replastering the cut part with good finish and colouring to match the wall, floor colour. Do not use casing caping if necessary use white oval pipe on surface.</p> <p>LIGHT POINT Note : Use Black for Neutral and Green for earth.</p>				
[a]	- Do - as per Item No. 10 for 1 Nos. of light point controlled by 1 No. of 5 Amp modular switch and plate with phase Neutral & earth wires.	50		NO	
[b]	- Do - for Fan point including SP modular switch, 5 Step humfree Electronic regulator, terminal box with hook for fan suspension from roof and plastering the opining. Existing fan hooks to be used.	3		NO	
[c]	- Do - for wall fan.	12		NO	
[d]	- Do - for Exhaust fan.	5		NO	
[e]	Bell point with bell push and ding dong bell.	1		NO	
[f]	Extension light point without control switch.	10		NO	
[g]	Sign board point with 2 x 2.50 sq.mm + 1 x 1.5 sqmm earth wire circuit from main panel to sing board at entrance with suitable junction box and 3 point connector.	1		NO	
11	<p>PLUG POINT - Do - as per Item No. 10 for 1 No. 5 pin 5 Amp socket controlled by 5 Amp SP switch. Both are mounted on the same Lighting switch board with necessary inter connection & earthing the earth pin.</p>	12		NO	

Sr. No.	Description	Quantity	Rate	Unit	Amount
12	Providing and fixing computer Terminal Board providing 3 No 5 pin 6 Amp plug socket outlet controlled by 1 Nos. 16 Amp modular SP switch with light indicator as switch board with independent power supply from UPS unit, [Fixing 15 A switch above Table on Side partition/Wall and 3 Nos Socket Below Table] including internal wiring with 1.5 Sq.mm PVC copper wire. Moduler Switch, Socket Plug, Plate Cover, Box etc. complete as diercted. Including 2 x 2.5 sqmm + 1 x 1.5 sqmm earth circuit from DB for computer power. (Three boards in one circuit)	25		NO	
13	- Do - as per Item No. 12 for 1 No. 5 pin 6 Amp power socket with modular SP switch and 1 No 16 Amp Power socket outlet controlled by 1 No 16 Amp modular switch with indicator including circuit wiring. Six boards in one circuit for raw power.	15		NO	
14	- Do - as per Item No. 12 for 1 No. 3 pin 15 Amp power socket outlet controlled by 15 Amp modular switch with indicator including circuit wiring 2 x 2.5 sqmm + 1 x 1.5 sqmm for earth from TPN DB.	2		NO	
15	Proviidng metal clad 20 A plug socket for A/C point including 20 A SP MCB -G in M.S Box painted powder coated and polished wooden baord mounted on wall. Including circuit wiring from AC MCB DB to AC point. 2 x 4 sqmm + 1 x 2.5 sqmm circuit.	11		NO	
16	FIXING OF FIXTURES Labour charges for fixing, connecting & commissioning twin flourescent lamp fittings in false ceiling and pannelling with necessary material. Fixture will supplied by Bank.				
[a]	4 x 20 W or 2 x 40 W Mirror optic.	30		NO	
[b]	1 x 40 W flourescent box type fixtures/ mirror optic type.	8		NO	
[c]	Spolt Light on ceiling.	10		NO	
[d]	Fixing Fan including road/clamp on ceiling	3		NO	
[e]	40 W lamp. Including supplying and fixing	2		NO	
[f]	Exhaust Fan	4		NO	
[g]	Wall Fan	12		NO	
17	Supply and installation of Telephone terminal with jack socket RJ 11 connection on suitable modular junction box. Including 2 pair telephone wire in FIA rigid PVC conduit concealed in wall/floor from Krone to Telephone point, including necessary junction boxes etc. complete as directed. Make connection in krone box.	15		NO	

Sr. No.	Description	Quantity	Rate	Unit	Amount
18	Supply and installation of Krone tag block in suitable covered M.S Box installed on angle iron frame grounded on wall of size as under.				
[a]	20 Pair	2		NO	
19	Supply and installation of Telephone cable armoured PVC insulated cable of tinned high grade electrolytic copper wires in PVC Pipe, on wall with proper saddles of following size. Delton make.				
[a]	10 Pair 0.5 mm insulated.	30		RMT	
TOTAL COST OF "I"				Rs.	<u> </u>

NOTE :

- (1) Work is to be carried out as per code of practice confirming to I.E Rules and PWD specification.
- (2) All Electrical materials are to be of ISI marked/approved make as per list.
- (3) Payments will be for actual quantities used.
- (4) All holes and cuttings to be made with Electrical tools.
- (5) Carry out wiring as per given plan.
- (6) Deductions will be made for improper work
- (7) **Cost of floor junction Boxes is included in respective items No separate payment shall be made for this**

(SEAL & SIGNATURE OF CONTRACTOR)

Sr. No.	Description	Quantity	Rate	Unit	Amount
[II] SUPPLYING OF LIGHTING FIXTURES					
1	Supplying and providing Surface mounting mirror optic for ceiling 4'-0" long of CROMPTON Make CSBW 1124HSB/N 2X36/40W T8 Including 36 Watts TLD Tube of Philips make or Crompton or Equivalent make .	6		NO	
2	Supplying and providing Recessed mounting mirror optic designed for ceiling 2'-0" x 2'-0" of CROMPTON Make CRFQ 11236/P5 Including 36 Watts PL-L Lamp of Philips make or Crompton or Equivalent make .	24		NO	
3	Supplying and Providing Down Lighter of CROMPTON Make DDLH 218/N6 with Copper Ballast or equivalent Wipro / Philips make. Including 18 Watts PL-C Lamp of Philips make or Crompton or Equivalent make .	8		NO	
3[a]	Supplying and Providing Down Lighter[Glass] of CROMPTON Make DDLH 218/G/B6 with Copper Ballast or equivalent Wipro / Philips make. Including 18 Watts PL-C Lamp of Philips make or Crompton or Equivalent make .	2		NO	
4	Supplying and providing Tube light 4'-0" long of CROMPTON Make CROM GOLD DSG 1114 DB or equivalent Wipro / Philips make. Including 36 Watts TLD Tube of Philips make or Crompton Equivalent make	4		NO	
5	Supplying and providing Mini Mirrorlite of CROMPTON Make TLN 11W 1X11W CFL with including Tube light	4		NO	
6	Supplying and providing Ceilling Fans 48" dia of Crompton make or Equivalent make .	3		NO	
7	Supplying and providing Exhuast Fan 9" dia with Crompton make or Equivalent make .	4		NO	
8	Supplying and providing Wall Fans 16" dia of Crompton make or Equivalent make .	12		NO	

TOTAL COST OF "II" _____

(SEAL & SIGNATURE OF CONTRACTOR)

Sr. No.	Description	Quantity	Rate	Unit	Amount
[III] DATA CABELLING WORK					
1	Providing data cable information out let AT & T, lucent, D Link Brand, Molex make point connection with RJ-45 connector, junction box with cover in making connection etc complete as directed. Including 'Supply and installation of computer data cable CAT-6 of AT & T, lucent, D Link Brand , Molex make including PVC pipe 25mm dia 1.5 mm thick, recessed in counter necessary, ceiling, wall .include RJ 45 connector on both end etc complete as directed..The conduit to be concealed in wall or floor by cutting , laying conduit replastering and colouring to match the wall or floor colour	24		NO	
2	Supply and providing Cat-6 patch cord wire of AT & T, Lucent, D Link ,Molex Make with RJ-45 connection on both and connector (2.0 mt. Long). Factory built Patch cord shall be company made. Patch cord must be handed over to Bank official and Reciept must be obtained and enclosed along with bill	24		NO	
3	- Do - as above but 1.0 mt. Long Cat-6 patch cord wires. Factory built	24		NO	
4	Supplying of 24 port Cat - 6 patch panel of 'D' Link make complete as directed.	1		NO	
5	Supplying of 9U Rack with lockable door of 'D' Link or Equivalent make complete as directed.	1		NO	
6	Supplying Istallation & Testing of 24 port unmanaged 10/100 mbh switch of 'D' Link Make	1		NO	
7	Supply and installation of computer data cable CAT-6 of AT & T, lucent, D Link Brand , Molex make including PVC pipe 25mm dia 1.5 mm thick, recessed in counter necessary, ceiling, wall .include RJ 45 connector on both end etc complete as directed..The conduit to be concealed in wall or floor by cutting , laying conduit replastering and colouring to match the wall or floor colour	50		RMT	
8	Installation of Rack, Patch panel , 16 port switch including patch panel connection inspection and testing and commissioning complete as directed.	1		JOB	
TOTAL COST OF "III"				Rs.	_____

Note:

- (1) **Cost of floor junction Boxes is included in respective items No separate payment shall be mabe for this.**

SUMMARY

[I] ELECTRIFICATION WORK	Rs.	_____
[II] SUPPLYING OF LIGHTING FIXTURES	Rs.	_____
[III] DATA CABELLING WORK	Rs.	_____
TOTAL COST OF A [I+II+III]		Rs.
(SEAL & SIGNATURE OF CONTRACTOR)		_____