

**BILLS OF QUANTITIES FOR ELECTRIFICATION WORK OF INDIAN BANK
FOR MAIN BRANCH, AHMEDABAD.**

Sr.No.	Description	Qty	Rate	Unit	Amount
[A] ELECTRIFICATION WORK					
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]	SPN, MCB DB Double Door for UPS. Input (old re-fixing) Incoming 63 A 4 - Pole MCB-1 No Outgoing 2 Pole 10 KA MCB 25 A - 3 Nos.	1		NO	
[b]	SPN MCB DB Double Door for computer.(old re-fixing) Incoming 2 Pole RCCB 100 mA sentivity 32/40 A - 1 Nos. Outgoing 10 A SP MCB - 4 Nos.	1		NO	
[c]	REINSTALLATION OF EXISTING TPN MCB DB for A. C as part of Main panel Incoming 63 A 4 Pole RCCB 100 mA sensitivity - 1 No. Outgoing 25 A SP MCB G 12 KA - 10 Nos.	1		NO	
[d]	REINSTALLATION OF EXISTING TPN MCB DB for Lighting as part of Main panel Incoming 40 A 4 Pole RCCB 100 mA sensitivity - 1 No. Outgoing 10 A SP MCB 10 KA - 10 Nos.	1		NO	
[e]	Supply an installation of 24 Hr, 7 days A/C timer with 2 nos power contector of M.D.S, L & T ,SEIMENS,THEBEN (indoasian) Make. All enclosed in sheet steel powder coated enclosure complete with all necessary termination for UPS /SERVER ROOM A.C	2		NO	
2	SHIFTING AND REINSTALLATION OF EXISITNG MAIN PANEL Shifting and reinstallation of existing Main Panel board with. Internal reconnecting as required etc complete as directed. Including removal shifting from present premisses to New Premisses Location Transportation etc	1		NO	

Sr.No.	Description	Qty	Rate	Unit	Amount
3	Providing and Installing of 100 A MCCB TPN Unit 25KA With variable thermal and magnetic release compartment with hinged door & locking arrangement duly fabricated from 18 SWG sheet metal box duly painted with one coat of red-oxide paint and two coats of approved enamel paints with Phase indicator lamps phase wise , control fuses & wooden back complete. THIS WILL BE INSTALLED NEAR MAIN DOOR - INSIDE OR OUTSIDE - OF THE BANK. (first ask to BM / Consultant / Architect / Bank Authority.) with earth fault protection by ELR 300mA-3.0A	1		NO	
4	Supply and installation of stranded aluminium 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 gouted on wall, spaced one mt.				
[a]	- Do - but 3.50 x 35 Sq.mm Aluminium cable.[From Meter To Main Panel Board]	0		RMT	
[b]	- Do - but 4 x 10 Sq.mm Aluminium cable. [From Main Panel to UPS DB and ATM Room]	15		RMT	
5	Cable end terminations of aluminium armoured cable, with compression type cable glands and lugs.				
[a]	- Do - but 3.50 x 35 Sq.mm Aluminium cable.	0		NO	
[b]	- Do - but 4 x 10 Sq.mm Aluminium cable.	0		NO	

Sr.No.	Description	Qty	Rate	Unit	Amount
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 6 Sq.mm and 1 No. of 2.5 Sq.mm for each PVC insulated copper wires. Including making connections [For UPS Inpit and Out Put]	0		RMT	
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	0		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]	GI wire 8 SWG	25		RMT	
[b]	10 SWG copper	20		RMT	
9	Providing, installing, testing and commissioning funnel type plate earthing with all necessary materials is & 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]	JEF Eco safe T-193 Hot DP galvanised with 50 mm dia outer & 25 mm inner dia P/P length 3 meters. Earthing chemical filling 2 Bags of 20KG each (Chemical GI Earthing) ETP MAKE or ASHLOK MAKE With 3 years Manufacturer warranty	1		NO	
[b]	Safe earthing electrode certified for use upto 11kv with 3.00 m pipe back filling compound 2 bag of 25 Kg. with outer pipe 50mm dia and inner 25 mm dia pipe and compound filling as per UL 476 as approved by PWD (Chemical Copper Earthing) ETP MAKE or ASHLOK MAKE With 3 years Manufacturer warranty	1		NO	

Sr.No.	Description	Qty	Rate	Unit	Amount
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10 **GENERAL POINT WIRING**

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.

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 saddles 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

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 correspondung Lighting switch. Board

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 capping if necessary use white

LIGHT POINT

Note : Use Black for Neutral and Green for earth.

[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.	35		NO	
[b]	Extension light point without control switch.	12		NO	
[c]	- 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.	4		NO	
[d]	- Do - for wall fan.	8		NO	

Sr.No.	Description	Qty	Rate	Unit	Amount
[e]	- Do - for Exhaust fan.	3		NO	
[f]	Bell point with bell push and ding dong bell.	1		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	1		NO	
	PLUG POINT				
11	- 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.	10		NO	
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 switche 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)	16		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	12		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.	3		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	8		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./LED	18		NO	
[b]	1 x 20 W LED fixtures/ mirror optic type.	10		NO	
[c]	LED Downligher on ceiling.	20		NO	
[d]	Fixing Fan including road/clamp on ceiling	4		NO	

Sr.No.	Description	Qty	Rate	Unit	Amount
[e]	1X7 watt LED Tube	0		NO	
[f]	Exhaust Fan	0		NO	
[g]	Wall Fan	6		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	6		NO	
18	Supply and installation of Krone tag block in suitable covered M.S Box installed on angle iron frame grouted on wall of size as under.	0		NO	
[a]	20 Pair				
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.	0		RMT	
[a]	10 Pair 0.5 mm insulated.				
TOTAL COST OF 'A'					

NOTE :

- [1] Work is to be carried out as per code of practice conforming 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**

Sr.No.	Description	Qty	Rate	Unit	Amount
[B] SUPPLYING OF LIGHTING FIXTURES					
1	Supplying and providing 'LED 1*36 watt (2*2') RECESS MOUNTED LUMINAIRE with making earthing connection complete to be recessed in false ceiling with all necessary hardwares, hanging frame arrangement, chains, hook etc., complete. (WIPRO MAKE LED CRCO 10R038HP57 or CROMPTON /PHILIPS/ Havelles (with 3 Year warranty)	0		NO	
2	Supplying and providing '12 W LED Downlighter to be recessed in false ceiling with all necessary hardwares, chains, hook etc., complete. (WIPRO MAKE LD71-121-XXX-65-RF or PHILIPS / CROMPTON / BAJAJ /Havelles (0		NO	
3	Supplying and providing LED Tube light 4'-0" long decorative box type surface fitting of CROMPTON Make Model No DMLN 1LT8 -16 with LTT8-20 LED Tube or Wpro Model GARNET LED TUBE BATTEN 18/20 W. etc complete or equivalent Wipro / Philips/Havells/Crompton make. (with 3 Year Warranty)	0		NO	
3[a]	LED tube light surface mounting type with tube, 1 x 7 Watt, complete Crompton Model : LINNET; CAT Ref No: LCL-07-CDL or equivalent Philips or Wipro/Bajaj/C&S/ Orient/	0		NO	
4	Supplying and providing Ceiling Fans 48" dia of Crompton/Bajaj make or Equivalent make .	0		NO	
5	Supplying and providing Exhaust Fan 9" dia with Crompton/Bajaj make or Equivalent make .	0		NO	
6	Supplying and providing Wall Fans 16" dia of Crompton/Bajaj make or Equivalent make .	0		NO	
6[a]	Removing and Reinstalltion of Existing Wall fan etc complete. Rate including Transporting from Existing Premises to New premisses	0		NO	
TOTAL OF ' B '					

[C] 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	16		NO	
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Sr.No.	Description	Qty	Rate	Unit	Amount
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	0		NO	
3	- Do - as above but 1.0 mt. Long Cat-6 patch cord wires. Factory built	0		NO	
4	Supplying of 24 port Cat - 6 patch panel of 'D' Link make complete as directed.	0		NO	
5	Supplying of 9U Rack with lockable door of 'D' Link or Equivalent make complete as directed.(old re-fixing)	1		NO	
6	Supplying Istallation & Testing of 24 port unmanaged 10/100 mbh switch of 'D' Link Make	0		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	0		RMT	
8	Old & New Installation of Rack, Patch panel , 24 port switch including patch panel connection inspection and testing and commissioning complete as directed.	1		JOB	

TOTAL OF ' C' _____

S U M M A R Y

[A] **ELECTRIFICATION WORK** _____

[B] **SUPPLYING OF LIGHTING FIXTURES** _____

[C] **DATA CABELLING WORK** _____

TOTAL OF [A + B +C] _____

(SEAL AND SIGNATURE OF CONTRACTOR)