BILLS OF QUANTITIES FOR ELECTRIFICATION WORK OF BANK OF BARODA FOR KHARGATE BRANCH, DIST. BHAVNAGAR

SEALED PRICE BID

Sr. No.	Description	Quantity	Rate	Unit	Amount
Note :	**Rate should be inclusive of material, labour, tools, machinary, scaffolding, final disposal of debris, cleaning cutting wastage etc. all taxes, transportation, VAT, Excise, Octroi etc. Excluding GST complete. [Good and Service Tax will be paid Extra as per Applicable Norms]**				
[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, terinal 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 for UPS. Input** 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 UPS Powe DB [OUT PUT UPS DB]** Incoming 32 A 2 Pole RCCB 100 mA sensitivity - 1 No. Outgoing 10 A to 20 A SP MCB -6 Nos.	1		NO	
[c]	**SPN MCB DB Double Door for RAW Power DB** Incoming 32 A 2 Pole RCCB 100 mA sensitivity - 1 No. Outgoing 10 A to 20 A SP MCB -6 Nos.	1		NO	
[d]	**TPN MCB DB for A.C DB as part of Main panel** Incoming 63 A 4 Pole RCCB 100 mA sensitivity - 1 No. Outgoing 25 A DP MCB G 10 KA - 8 Nos.	1		NO	

Sr. No.	Description	Quantity	Rate	Unit	Amount
[e]	**TPN MCB DB for LIGHTING DB as part of Main panel** Incoming 40 A 4 Pole RCCB 100 mA sensitivity - 1 No. Outgoing 10 A SP MCB 10 KA - 8 Nos.	1		NO	
[f]	Supply an installation of Sign board Timer of L & T make Cat. No. 67DDTO digicom Timer with 16A. 4P contactor / Theben make Cat no. SUL 180 a - T180 0 001 ANALOGTimer with L & T make contactor MNX 12 (operating coil voltage 230V, 50 Hz). (24 hrs).- 1 No for signage light	1		NO	
2	Supply installation testing and commissioning of power control 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 [AVF meter) with select switch inbuilt with set of CTs control fuses Outgoing 63A 4 Pole MCB-1 No 63 A TPN MCB-G -1No. 10 A DP MCB-L -3 Nos. 40 A 4-pole MCB -2 No	1		NO	
2[a]	Providing and installing 1 Switch Control Contactor Logic Block set with locking arrangement duly fabricated from 18 SWG sheet metal box duly painted with duly powder coated of approved paints with wooden back complete. Comprises of 63A 4pole NC type Power Contactor-1 nos, 40 A 4pole NC type Power Contactor-1 nos., 32 A 3 pole NC type Power Contactor-3 nos. All Contactor coil must be operated on 230 V Ac supply type. All the power Connection to terminal block need to be provided by 6Sq mm FRLS type wire with lugging. All Contactor Aux Coil Supply need to be provided by 1.5 Sq mm FRLS type Wire. Bpody Earthing need to provide.(**Other technical Specification with drawing provided in Technical bid Part.)**	1		NO	

Sr. No.	Description	Quantity	Rate	Unit	Amount
2[b]	Supply and installation of Mushroom Head Key Switch Stay put (press to lock turn to release) with mounting cover at Entrance for Single switch control of Branch Supply. Location at Entrance need to ask BM before Installation.	1		NO	
3	Providing and Installing of 100 **A MCCB TPN** Unit 18KA 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 enamell 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 adjustable**	1		NO	
4	Supply and installation of stranded alluminium conductor. **XLPE** Insuleted 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 4x 35 Sq.mm Aluminium cable. **From Meter To Main Panel Board**	75		RMT	
[b]	- Do - but 4 x 10 Sq.mm Aluminium cable. **From MAIN PANEL BOARD To UPS INPUT DB**	45		RMT	
[c]	2CX 1.5 Sq mm armoured cable from Contactor Block Distribution box to Pushbutton Switch at Entrance)	25		RMT	
5	Cable end terminations of alluminium armoured cable, with compression type cable gladns and lugs.				
[a]	- Do - but 4x 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 juction 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 eath PVC insualted copper wires. Including making connections **[For UPS Input/ OutPut]**	30		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 followiong sizes. FIA FRLS ISI marked. MMS conduits				
[a]	25 mm dia.	55		RMT	
8	Suppy 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.				
[a]	G. I. Wire 8 SWG	45		RMT	
[b]	10 SWG bare copper wire.	45		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 masonary chamber. **Note:Please show the earth pit and earthing Electrode before installation**				
[a]	Safe erthing electrode certified for use upto 11kv with 3.00 m pipe back filling comound 2 bag of 25 Kg. with outer pipe 50mm dia and inner 25 mm dia pipe and compund filling as per UL 476 as approved by PWD (Chemical Copper Earthing) **ETP MAKE or ASHLOK MAKE With 3 years Manufacturer warranty**	1		NO	
[b]	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	
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 Guage M.S switch boxes shall be used.				

Sr. No.	Description	Quantity	Rate	Unit	Amount
	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				
	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 correspounding 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 caping if necessary use white oval pipe on surface.				
	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.	50		NO	
[b]	Extension light point without control switch.	18		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.	5		NO	
[d]	- Do - for wall fan.	16		NO	
[e]	- Do - for Exhaust fan.	NIL	NIL	NO	NIL
[f]	Bell point with bell push and ding dong bell.	2		NO	
[g]	Sign board point with 2 x 4.00 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	

Sr. No.	Description	Quantity	Rate	Unit	Amount
	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.	20		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 UPS 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	20		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 sqmm + 1 x 2.5 sqmm circuit.	5		NO	
16	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.	20		NO	
17	Supply and installation of Krone tag block in suitable covered M.S Box installed on angle iron frame grounted on wall of size as under.				
[a]	20 Pair	2		NO	
		TOTAL COST OF "A"		**Rs.**	

Sr. No.	Description	Quantity	Rate	Unit	Amount
	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 makde 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 mabe for this**				
	[SEAL AND SIGNATURE OF CONTRACTOR]				
[B]	**SUPPLYING OF FIXTURES** (NOTE : ANY OF FIXTURES AND FITINGS SHALL BE RE-CONFIRMED WITH THE ARCHITECTS / CONSULANTS BEFOTE ORDERING THEM. supply,installation, testing and commissioning (including supply and fixing flexible wires from holder to fixtures hardwares etc.) **Here Led fitting & LED Driver both must be of same make only.**…. - **The marking & cutting of fixtures should be in ele. contractor's scope..** **Make.as mention in the Recommened make (AS APPROVED BY THE ARCHITECT/BANK)**				
1	Supply, installation, testing and commissioning of LED 36 watt (600mm x 600mm) RECESS MOUNTED LUMINAIRE of Approved make with making earthing connection complete to be recessed in false ceiling with all necessary hardware, hanging frame arrangement, chains, hook etc., complete. (with minimum -03- Years warranty)	35		NO	
2	Supply, installation, testing and commissioning of ' 6”/9” dia. of 12 W LED Downlighter to be recessed in false ceiling with all necessary hardware, chains, hook etc., complete. (with minimum -03- Years warranty)	30		NO	
3	Supply, installation, testing and commissioning of 18/20 W LED tube light 4 Ft. long with white diffuser cover batten type, 230 V, 50 Hz duly wired and tested. (with minimum -03- Years warranty)	13		NO	
3[a]	Supply, installation, testing and commissioning of Compact Fluorsent tube light 1 x 11 W Surface mounting type with tube, roter, bi - pin holders, starter, choke , complete. (Wipro make Cat. No. WRP 21111 or Equivalent Philips make)	2		NO	

Sr. No.	Description	Quantity	Rate	Unit	Amount
4	Supply, installation, testing and commissioning of 65 watt of 1200 mm Ceiling Fan with double ball bearing, fan step modular regulator, Max. 3 feet Fan Rode, Anchor Fastener, etc. (White Colour) (with minimum - 01- Years warranty)	5		NO	
6	Supply and installation of 400 mm sweep wall mounted fan **With on site 2 years warranty (Crompton model · High Flow or Equivelent Make.as mention in the Recommened make (AS APPROVED BY THE ARCHITECT/BANK)**	16		NO	
		TOTAL COST OF "B"		**Rs.**	
[C]	**DATA CABELLING WORK**				
1	Providing data cable information out let Lucent, D Link Brand 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 Lucent, D Link Brand 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 **[For Branch]**	30		NO	
2	Supply and providing Cat-6 patch cord wire of Lucent, D Link 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 optained and enclosed along with bill**	30		NO	
3	- Do - as above but 1.0 mt. Long Cat-6 patch cord wires. Factory built	30		NO	
4	Supplying of 24 port Cat - 6 patch panel of 'D' Link make complete as directed.	2		NO	
5	Supply and installation of 12 U Rack with equipement tray, power strip	1		NO	
6	Supplying Istallation & Testing of 24 port unmanaged 10/100 mbh switch of 'D' Link Make	NIL	NIL	NO	NIL
7	Supply and installation of computer data cable CAT-6 of Lucent, D Link Brand 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 (If required)	150		RMT	

Sr. No.	Description	Quantity	Rate	Unit	Amount
8	Old existing or New Installation of Rack, Patch panel , Port switch fixing & connection inspection. and testing and commissioning complete as directed **(New or Old Intallation)**	1		JOB	
			TOTAL COST OF "C"	**Rs.**	

SUMMARY FOR BRANCH

[A]	**ELECTRIFICATION WORK**	**Rs.**	
[B]	**SUPPLYING OF FIXTURES**	**Rs.**	
[C]	**DATA CABELLING WORK**	**Rs.**	
	TOTAL COST OF ELECTRICAL WORK [A + B + C]	**Rs.**	

Note:

1. **Rate includes dismentaling of existing lighting, wiring, data cable, switch board, lighting fixtures, fans, DBS etc. and storing / standing the same a location as directed by bank Nothing extra shall be paid for then**
2. **Temporary shifting of Branch Electrification work at convinient location as per the instruction of Architect/Bank. Removing old wiring in area which will be redesigned, The supply for this shall be taken from the temporary connection, also providing temporary power supply for computers and data connection for computers with wiring, switchboard, Comp. I/O Points,etc. for smoothly running of the branch with removing & reshifting of the computers , printers, etc. bank hardware accessories. arrangement of electrification to the entire satisfaction of Branch Manager complete as directed.by bank Nothing extra shall be paid for then.**

Tender Amount(In Words) Rupees:

(SIGNATURE OF TENDERER/FIRM)

NAME OF TENDERER

(SEAL OF FIRM)
PLACE:
DATE: