

BOQ -ELECTRICAL WORKS OF Canara Bank Pardi Branch, Nagpur.

No.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
A	SECTION - A				
A	MAIN PANEL / DISTRIBUTION BOARDS / MCCBs :-				
	Supplying , Installing Testing & Commissioning of LED Indicator (Red Blue Green & Yellow colour) for showing the Power ON/ Off position in Branch Light / Raw Power (1) , AC (1) , UPS OUT POWER SUPPLY (2) , INVERTER OUT POWER SUPPLY (1) . All indicators which needs to by off will be placed in one line and all indicator which needs to be off must be in other line . Marking of the Indicators to be done suitably.	Nos.	5.00		
1.1	Mains MCCB's				
	Supplying & Installing 100A, FP MCCB in Sheet Steel Enclosure, complete with Gland Box etc (For disconnecting Main Power Suply in Branch except UPS Charging and ATM Power supply and Glow Sign Board)				
	a. 100 A FP MCCB 16kA	Nos.	1.00		
	b. Sheet steel Enclosure Box for FP MCCB	Nos.	1.00		
1.2	Supplying , Installing Testing & Commissioning 40 A, DP MCB in Sheet Steel Enclosure, complete with Gland Box etc(To be installed at gate/Main Entrance to disconnect the UPS Power supply & Inverter Output Power supply the Branch)	Nos.	2.0		
1.3	Supply , Installation, connection of 200Amp Kit kat Fuse unit 3 nos with 200 Amp neutral link on wooden board (3' x 3') complete in all respect as required.	Nos.	1.00		
1.4	MCB DISTRIBUTION BOARDS				
	ELECTRICAL PANEL: Design, manufacture, providing, storing & installing in position, effecting proper connection, testing and commissioning of panel made of 14 SWG, CRCA sheet steel. It shall be dust and vermin proof. It shall have compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required, duly painted from inside as well outside. It shall have the following - Incomer :1 No. 100 Amp. TPN, MCCB (16 KA breaking capacity), Busbars.:150 Amp., 3 phase, 4 strips, 415 volts, 50 Hz. copper busbars with colour coded PVC heat shrinkable sleeves. Instruments. Multi function Meter : for Voltage, Ampere, Power factor, KWH, Data 1 No. with CT 75/5 Outgoing. 0 Nos. 100 Amp ,16KA, TPN MCCB (For AC VRF input and spare feeder) 3 Nos. 63 Amp TPN,MCCB (For AC DB, Light / PDB , input and spare feeder) 0 Nos. 40/63 Amp. TPN, MCB (For and Spare Feeder) 2 Nos 10 /16/32 Amp 10KA DP MCB.(for Glow Sign board and Strong Room Lighting, spare feeder) The design of panel should be got approved by the Architect before manufacturing.The job shall be completed, to the satisfaction of the Bank Engineer/Architect.	Nos.	1.00		
2	Supply & installation , connection of 100A Copper Busbar Ashoke make only	1	set		

4.0	S/I/T/Commissioning 4 way Double door VTPN DB (UPS, ,INVERTER , ATM DB, Glow Sign Board Power Supply) complete in all respect as required having	1	NO.		
a	Incoming- 100 A TP MCCB 1 NOS				
b	Outgoing- (i)63 A TP MCB 3 NOS with all accessories (ii)- 40/32/20 A DP MCB 2 NOS with all accesses Separate Neutral Bus for Each Phase to be given				
5	LIGHTING CUM RAW POWER & AC & ATM DB Double door ETPN LDB & AC & ATM consist of				
a	Incomer: - 40/32 Amps TPN MCB - 1 No. 40A, 100mA, 2 Pole RCCB per phase				
b	Outgoing: - 10 / 16Amps SP MCB, C-curve - 12 Nos. (Make: -L&T/ Legrand / Siemens / Merlin Gerin)	3	SET		
5	UPS POWER DISTRIBUTION BOARD Double door (UPS POINT FOR COMPUTER) 12 WAY Double door SPN UPS DB consist of				
a	Incomer: - 40/32 Amps DP MCB - 1 No.				
b	Outgoing: -16/10 Amps SP MCB , D-curve- 10 Nos. (Make: - L&T/ Legrand / Siemens / Merlin Gerin)	1	SET		
5	UPS/INVERTER DISTRIBUTION BOARD (CCTV/FA/BA/DATA RACK/ATM) 8 WAY Double door SPN UPS DB consist of				
a	Incomer: - 40/32 Amps DP MCB - 1 No.				
b	Outgoing: -16/10 Amps SP MCB , D-curve- 6 Nos. (Make: - L&T/ Legrand / Siemens / Merlin Gerin)	2	SET		
6	UPS /INVERTER				
a	6 Way Double door TPN Db (For Ups/Inverter Master Db) Incomer: - 63 Amps DP MCB - 1 No. Outgoing: -40/32 Amps DP MCB - 2 No.	1	SET		
b	SITC of 63/40 Amp TP 10KA MCB in Metalic encloser,for Branch UPS and invertor in put power supply complete in all respect as required	2	NOS.		
c	SITC of 32 Amp TP 10KA MCB in Metalic encloser,for ATM UPS in put power supply complete in all respect as required	1	NOS.		
d	SITC of 40/32 AMP industrial socket along with DPMCB for branch UPS & Inverter output power supply complete in all respect as required.	3	NOS.		
7	TPN Double door MCB FOR Casset AC -63A/40A 4pole MCB complete with enclosure and accessories at out door of AC	2	SET		
8	Signages Timer-S/I/T/Commissioning of Automatic Timer control for Signages with Automatic Power On / Off to sign board with required capacity of Automatic 24 Hrs Time Delay operation designed for cyclic mode as per I.S. standard etc. complete. (Basic Cost Not Less Then Rs.2500/- Only) (L&T make)	1	NOS.		
9	AC Cyclic Timer - Supply, Installation & Commissioning of Automatic AC Cyclic for 2 nos. of Split/ Window ACs with 1 no. of Real Time Electronic Timer Switch DW219BLK of MK & 2 nos. Contactor/ High Power Relay, Mains ON & AC-1 & AC-2, indicating LED type Lamps, 2A HRC fuse with base for contactor coil & 1 no. 32A DP MCB with Auto/ Manual Switch, in Powder coated MS. Box & all accessories with Elmax make terminals for outgoing/ incoming connections	1	NOS.		
TOTAL OF SECTION A					

B	SECTION - B			
1	POWER CABLE & TERMINATION			
a	Supplying, Installation, Testing & Commissioning of LT Cable rated for 1100 Volts AC as per IS Standard with necessary accessories with fine resistance cable. Rates are inclusive of LT Cable Termination of CU/AL with respective following size cable (Make: - Dowells /Jainsons) (Make: - Finolex-FR / Polycab Havells)			
2	3.5 Core X70 Sq.mm. Aluminum Armoured cable with 8 swg GI wires for earthing	40	Mtrs	
3	4 Core X 16 Sq.mm. Cu. Armoured XLPE Cable	0	mtrs	
4	4 Core X 10 Sq.mm. Cu. Armoured XLPE Cable	35	Mtrs.	
5	4 Core X 6 Sq.mm. Cu. Armoured XLPE Cable	75	Mtrs.	
6	4 Core X 4 Sq.mm. Cu. Armoured XLPE Cable	50	Mtrs.	
7	3 Core X 6 Sq.mm. Cu. Armoured XLPE Cable	40	Mtrs.	
8	3 Nos. X 10 Sq.mm. PVC insulated Copper flexible cable in 32mm pvc Flexible pipe with suitable size PVC Glands for Termination	20	Mtrs.	
9	3 Nos. X 2.5 Sq.mm. PVC insulated Copper Armoured cable	40	Mtrs	
	TOTAL OF SECTION B			
C	SECTION - C			
1	LIGHT POINT WIRING			
	Supplying, Installation, Testing & Commissioning of Light Point Wiring using 1100 Volts grade with 3 Nos. of 1.5 Sq.mm. Copper PVC insulated FRLS (flame retardant low smoke) through PVC conduits of 25mm of 16 Gauge thickness. All the wiring below false ceiling on wall must be concealed. All the drops wire from the junction box to the light point must be in flexible pipe with gland at the junction box. (Make: - Finolex / RR / Polycab - FRLS) Rate quoted must include the cost of circuit wiring from DB Switchboard & switchboard to switchboard, switches, Conceal Box, Plate and Required Accessories etc. (Make as per list)			
1a	1 Light control by 1 switch	35	NOS.	
1b	2Light control by 1 switch	9	NOS.	
1c	3Light control by 1 switch	1	NOS.	
1d	Glow sign board wiring with 16Asp mcb termination	1	NOS.	
1e	Half Socket Point on Lighting Board.	10	NOS.	
1f	Bell Point With Indicator Type Bell instrument	2	NOS.	
1g	Exhaust Fan Point	4	NOS.	
1h	Ceiling Fan Point With Fan Hook, 120W step type Fan Regulator etc.	14	NOS.	
1j	POWER POINTS- wiring for 5/16 Amp-6-pin sockets by using 4sq.mm PVC insulated 1100v grade copper conductor wire with independent 2.5 sq.mm earth wire from DB to first and fixing of 16amp. 6-pin socket with 16amp. Switch INDOOR FOR CASSETS UNITS	6	Nos	
1k	A.C. point- wiring with 2 X 4 sq. mm copper conductor & 1 X 2.5sq. mm copper conductor form AC DB to AC point in 16 swg PVC conduit with 10/20/25 Amp MCB, Metallic Plug & Socket DB complete in all respect Indoor / OutDoo (1TR & 1.5 TR AC) (Anchor/Havells/Legrand make)	5	Nos	
1l	A.C. point- wiring with 2 X 6 sq. mm copper conductor & 1 X 4 sq. mm copper conductor form AC DB to AC point in 16 swg PVC conduit, 20/25 Amp Metallic Plug & Socket DB complete in all respect Indoor / OutDoor (2TR AC)	2	Nos	
	TOTAL OF SECTION C			

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D SECTION - D					
1	FLOOR RACEWAYS / CONDUITS				
	Supplying, Installation, Testing & Commissioning of following raceways / conduits manufactured as per sizes given below in flooring. The rate shall be inclusive of removing the flooring by cutter & back filling the same with required Sand, Cement etc. and giving the finishing upto the floor level as per instructions of Architect/bank engineer /Consultant.				
1a	60mm X 40mm X 2mm Aluminum Raceways.	0	Mtrs.		
1b	25mm PVC PipeforRaceways.	0	Mtrs.		
2	FLOOR JUNCTION BOX				
	Supplying, Installation, Testing & Commissioning of following GI Junciton Boxes in floor of 16 SWG thick duly powder coated. The rate shall be inclusive of providing Sand, Cement etc. and finishing the same upto the floor level as per instructions of the Architect/bank engineer /Consultant.				
2a	150mm X 150mm X 50mm, 16 SWG Junction Box with Stainless Steel Cover Plate.	0	NOS.		
2b	200mm X 200mm X 50mm, 16 SWG Junction Box with Stainless Steel Cover Plate.	0	NOS.		
3c	300mm X 300mm X 40mm, 16 SWG Junction Box with Stainless Steel Cover Plate.	0	NOS.		
TOTAL OF SECTION D					
E SECTION - E					
1	RAW POWER POINT				
	Supplying, Installation, Testing & Commissioning of raw power socket point on Skirting, Walls, for tables using heavy duty PVC pipe run concealed within Walls / Partition / Work Station etc. The rate shall be inclusive of MS concealed box, switch, socket, surface plate,pvc pipe from junction to point. Rate quoted must include the cost of circuit wiring by using 3 X 2.5 sqmm Copper conductor PVC FRLS wiresfrom DB Switchboard & switchboard to switchboard (Make as per list)				
1a	6 Amps 3 Pin Or 5 Pin Socket and 6 Amps Switch Point.	8	NOS.		
2	COMPUTER SOCKET POINT				
2a	Supplying, Installation, Testing & Commissioning of computer socket point on Skirting, Walls for for tables using PVC pipe run concealed within Walls / Partition / Work Station etc. The rate shall be inclusive of MS concealed box, switch, socket, surface plate pvc pipe from junction to point. (Make - MDS /MK / North West) Rate quoted must include the cost of circuit wiring from DB Switchboard & switchboard to switchboard with 3 Nos. X 2.5 Sq.mm. PVC insulated Copper flexible cable in 25/32mm pvc pipe with suitable size PVC Glands for Termination for 3 Nos. of 6 Amps socket below work station on 8 module plate & 1 No. of 16 Amps SP switch with indicator above work station.	10	NOS.		
2b	1 No. of 6/16 Amps socket with 1 Nos. of 16 Amps SP indicator switch above work station.	10	NOS.		
TOTAL OF SECTION E					
F SECTION - F					
1	LIGHT FIXTURE				
	Supplying, Installation, Testing & Commissioning of following light fixtures complete of approved make as per specification with all fitting, accessories such as Junction Box, Hardware, Starter, Connector, Lamps, Tube etc. (Before Installation Sample must be shown to Architect / Engineer)				

1a	2x2 LED FIXTURE suitable for recess mounting. Aluminium Body Milky Difuser, Powder coated bottom frame with fitting deptly of 35mm in ceiling with Headframe & all asscessories complete with in built Driver & all required accessories	12	NOS.		
1b	15 watts led downlighter with Aluminium Die Cast body complete with in built Driver & all required accessories	24	NOS.		

1c	20W LED 4' Baten fitting Rainforced plastic body, milky difusser	8	NOS.		
1d	48" Ceiling Fan of Bajaj/CG/Havells/ Usha with Double ball bearing decorative type as directed by architect	14	NOS.		
1e	Supply & fixing of 400mm wall fan as directed by architect	1	No		
1g	12" Exhaust Fan modular type with bird louvers of Unique / GEC / Crompton make.	4	NOS.		
TOTAL OF SECTION F					
H	SECTION - G				
MISCELLANEOUS WORK					
1	Supplying/Installation/Testing & Commissioning of Earthing station with 600 X 600 X 6mm thick GI plate as per IS rule. Rate shall be inclusive of supply installation of GI plate, 25mm dia GI pipe with funnel for water and 450mm Cast Iron cover with its frame. Necessary digging of earth pit, excavation, back filling of earth, electrode, charcoal, salt layer & brick masonry work in proper manner. (The electrode should be buried not less than 4.5 Meters deep and resistance should be not less than 0.5 ohms.)	2	NOS.		
2	Supplying/Installation/Testing & Commissioning of Earthing station with 600 X 600 X 6mm thick CU plate as per IS rule. Rate shall be inclusive of supply installation of GI plate, 25mm dia GI pipe with funnel for water and 450mm Cast Iron cover with its frame. Necessary digging of earth pit, excavation, back filling of earth, electrode, charcoal, salt layer & brick masonry work in proper manner. (The electrode should be buried not less than 4.5 Meters deep and resistance should be not less than 0.5 ohms.)	2	NOS.		
3	S/I/T/Commissioning of 1 No. of 10 Sq.mm. single core PVC flexible copper wire for UPS in 25mm PVC conduit with all required accessories etc.	70	Mtrs.		
3a	S/I/T/Commissioning of 25mm X 3mm GI Earthing Strip.	15	Mtrs.		
5	Arranging temporary Power & Lighting for all agencies to work . The rate shall include statutory aproval from Local Electrical Inspectorate & other required satautary bodies, preparation of AS-BUILT drawings, Testing of the installation & prearaition of test report as required by statutory bodies. Note: The rate to include cost of suitable temporary Lighting for all areas as per requirement during work.	1	nos		
6	S/I/T/Commissioning of light cencors for cabins /conference room	1	nos		
TOTAL OF SECTION G					
G	SECTION - H				
TELEPHONE CABLING					
1a	Supplying, Installation, Testing & Commissioning of 50 pair telephone armoured Jaily cable (Make - Polycab)	0	RMT		
	Supplying, Installation, Testing & Commissioning of 20 pair telephone unarmoured cable in 32mm Pvc Pipe. (Make - Polycab)	35	RMT		
1b	S/I/T/Commissioning of 50 pair telephone tag block with 100 Pair krone module with termination and crimping etc. complete. (Make - Delton / ITL)	1	NOS.		
1c	Supply & installation of Telephone point wiring on workstations/tables/partitions by using 2-pair cable pulled through floor raceways/conduits and taken upto the table top using PVC rigid / flexible conduits run concealed.Each point consists of one RJ-11 jack type telephone socket,MS box flush to the surface, front plate etc & hardware asrequired.Rates are inclusive of PVC CONDUIT PIPE	8	NOS.		
TOTAL OF SECTION H					

J	SECTION - I				
	NETWORKING & DATA CABLING				
1a	Providing, fixing, testing and commissioning of all nodes of four pair UTP CAT 6 LAN cables length upto 30 meter length or less as per site condition in suitable size 20/25 mm dia, 16 SWG wall thickness rigid PVC conduit with conduit accessories like bend/junction box/ fan box etc on surface/recessed manner and making good all the damages, painting, cleaning the site etc. complete as required as per site condition and as directed as required. Junction box should be covered with Stainless steel plate with screw with gasket for protection of water/dust. Providing, fixing, testing and commissioning of modular type RJ45 cat-6 I/O information outlet, single / dual / quad type face plate, PVC back box etc. including Termination, Testing, Certification and Documentation of UTP Points and complete system as required with suitable size of MS/PVC modular boxes complete, all accessories with insulation displacement connectors etc suitable for CAT 6 UTP cabling with RJ-45 socket with testing and commissioning of STP cabling with scanner for all the nodes/switches/jack panel complete (Each point/circuit/cable from both load and source end to be marked with ferrules.) Make of Material:- (i) Data Cable, Cat 6 cable, Switch, Jack panel, Rack, Patch cords & Other accessories:- D-Link, Legrand	11	Nos		
1c	Supply of 1 MTR Cat-6 patch cord	11	Nos		
1d	Supply of 2 MTR Cat-6 patch cord	11	Nos		
1e	S/I/T/Commissioning of Gigabyte Cat-6 24 port patch panel. (DLINK)	1	nos		
1f	S/I/T/Commissioning of 12 U Rack. (D - Link)	1	nos		
TOTAL OF SECTION J					
SUMMARY					
A	SECTION A				
B	SECTION B				
C	SECTION C				
D	SECTION D				
E	SECTION E				
F	SECTION F				
G	SECTION G				
H	SECTION H				
I	SECTION I				
TOTAL					

GST EXTRA AS APPLICABLE

for S.Nandedkar & Associates
Architect


