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BILL OF QUANTITY FOR ELECTRICAL WORKS
FOR BANK OF BARODA, MAHOBA BRANCH

S.No.	Particulars	Unit	Qty.	Rate	Amount
	A - Electrical wiring (Quote for all switches & sockets Modular type including boxes & cover plate) - Anchor Roma/ Schneider/ Siemens/ Crabtree				
	FRLSH Copper stranded wires - Finolex/ Skytone/ RPG/ Havells or as approved by Architect/ Bank				
	Armoured Cables - Skytone/ RPG/ Havells or as approved by Architect/ Bank				
	MCB's, MCCB's, Switchgears & Distribution Boards - Siemens, ABB/ Hager				
	The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 750mm interval & finally finishing the surface & matching the same with the existing surface. Item 1,3, 4 & 5				
	The rate should include the cost of all materials, modular switch complete with MS box & cover plate, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc				
1	Point Wiring for light, fan & exhaust fan points controlled thru modular switches complete with boxes & cover plate - The point wiring shall be carried with 3 x 1.5sq.mm FRLSH (Fire Resistant low smoke Halogen) stranded Cu. Wires in 20mm PVC conduit pipe concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The job shall be complete & to the entire satisfaction of the Bank. Each Switch board should be provided with suitable capacity fuses/ fuse indicator	Point	65		
2	6 A switch socket points on Sdb: S/F of 6A switch points with an additional indicator and 6Amp. modular Type switch & socket. It shall have 3 x 1.5sq.mm FRLSH (Fire Resistant low smoke Halogen) stranded Cu. Wire as per requirement. The job shall be complete & to the entire satisfaction of the Bank.	Point	10		
3	Circuit Wiring (Light, fan, 6Amps Switch points) : Supply & laying of circuit wiring for light, Fan & 6 Amp. Switch points with 3x 1.5sq.mm FRLS Cu stranded wires laid in 20mm conduit pipe concealed in wall/ floor/ panelling/ partitions or on the ceiling as per requirement. The job shall be complete & to the entire satisfaction of the Bank.	m	223		
4	Circuit Wiring (Single 6/16Amps power Points) : Supply & laying of circuit wiring for 6/16 Amp. Switch points with 2 x 2.5 + 1x 1.5sq.mm FRLSH (Fire Resistant low smoke Halogen) Cu stranded wires laid in 20mm conduit pipe concealed in wall/ floor/ panelling/ partitions as per requirement. The job shall be complete & to the entire satisfaction of the Bank.	m	76		
	5ckts - 2 c/c, 2 separate ckts for router & 1 D/w				
5	Circuit Wiring for twin 6/16Amps power Points: Supply & laying of circuit wiring for 6/16 Amp. Switch points with 2x 4.0 + 1x 1.5sq.mm FRLSH (Fire Resistant low smoke Halogen) Cu stranded wires laid in 20mm conduit pipe concealed in wall/ floor/ panelling/ partitions as per requirement. The job shall be complete & to the entire satisfaction of the Bank. 2nd PP to be inter looped with first PP with 2x1.5 + 1x1.5 sq.mm FRLSH Cu stranded wires.	m	66		
	Total 4ckts - 1 for BM, 2 for 4officers on counters & 1for pantry				
6	Supply & fixing of 6/16 Amps. modular type switch & socket for power plug points complete with MS box & cover plate etc as per requirement. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) & finally finishing the surface & matching the same with the existing surface. The job shall be complete & to the entire satisfaction of the Bank.	Each	13		
	<u>B - Air - Conditioning</u>				

1	Circuit wiring with 2x4.0+ 1x 1.5sq.mm FRLSH (Fire Resistant low smoke Halogen) Cu stranded wires to be laid in 20mm PVC pipe heavy duty laid & concealed in wall/ floor/ panelling/ partitions as per requirement. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) & finally finishing the surface & matching the same with the existing surface. The job shall be complete with connection at both ends & to the entire satisfaction of the Bank.	m	101		
2	Supply & Fixing of Siemens make plug & socket 1P complete with 32A 2P IP 20 Siemens 8GB0501SRC or equivalent approved by Architect. The job shall be complete & to the entire satisfaction of the Bank.	lcn	6		
	<u>C - UPS</u>				
1	S/laying of 4 core 6sq.mm XLPE insulated armoured Copper conductor cable from main Panel to 4way TPN Db in the UPS room to be laid in heavy duty 25mm PVC conduit/ pipe & run on surface or concealed in wall/ floor/ flase ceiling including connections at both ends with lugs.	m	24		
2	Supply & Fixing of 4 way HTPN Db single door IP 20 (Siemens 8GB32201RC04) complete with 32A 3P MCB as incomer & 2 x 32A 2P MCB complete in all respects to the entire satisfaction of the Architect/ bank.	Each	1		
3	Supply & laying of incoming & outgoing wiring to & from UPS with 2x 4 + 1x 1.5sq.mm FRLSH (Fire Resistant low smoke Halogen) stranded Cu. wire conductor to be laid in 20/25 mm flexible PVC pipe heavy duty to UPS incoming & from UPS outgoing.	m	10		
4	S/F of 63A 2P MCB in 2way metal enclosure box for regulating UPS out put including	Each	1		
5	Supply & laying of 2x 4.0sq.mm + 1x 1.5sq.mm FRLSH stranded Cu. wire conductor to be laid in 20/25 mm flexible PVC pipe heavy duty from UPS outgoing 63A 2P MCB to the proposed 14way SPN Db located at rear of branch.	m	10		
6	Supply & fixing of 14way SPN Db double door IP 43 Siemens make complete as under Incoming - 40A 2P MCB - 1Nos. 10Nos. - 10A 1P MCB of 10ka rating (MDS/ Hagers/ Siemens/ ABB)	Each	1		
7	Wiring for computer terminal points with 3 x 1.5sq.mm Fire Resistant Low Smoke Halogen stranded Cu.wires to be laid in 20mm OD PVC conduit or 1" vertical drops heavy duty laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. -From UPS - SPN Db - circuits for computer stations	m	137		
8	Nodes - Supply & fixing of 3nos. 6A switches 1 module & 3nos. sockets 2modules Modular type complete with GI Box, Cover plate etc. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor/ panelling/ partitions (Without damaging the building/wall) & finally finishing the surface & matching the same with the existing surface. The job shall be complete & to the entire satisfaction of the Bank.	Nos.	10		
	<u>D - DISTRIBUTION MAINS</u>				
1	S/F of 3nos.100A Kit kat rewirable (Porcelain Fuse carrier & base) Havells IHKRN4100 with Neutral Terminal 11 Holes with terminal shroud & cover - Siemens 8GB9911NPE or equivalent & making its connection from electronic meter c/w wooden board etc as required.	Set	1		
2	SITC of wall mounted L T panel fabricated from CRCA sheet 1.8mm dust proof, vermin proof as under - All switchgears to be of Siemens/ ABB/ Hager Incomer - 100A 3P MCCB 25Ka with adjustable thermal & Magnetic trip unit Changeover 100A TPN HPL/ Sochomac/ ABB	Set	1		
	OUTGOINGS - 63 Amp 3P MCB - 3nos - 2 for LHS and RHS AC, PP & LF Db's 63A 3P MCB - 1no. for UPS 63 Amp 3P MCB - 1nos. Spare 32Amp -2P MCB - 4nos. for Signage, Fire alarm, strong room & spare Bus Bar - 100 A c/w Ammeter & voltmeter, selector switches, Indication lamps etc.				
	Cable entry from top & bottom - removable gland plates (bottom at 2 points) c/w powder coated Siemens Grey paint (two coats) with name labels for all incoming & outgoing feeders. The panel shall be complete in all respects including all accessories such as earthing bus, Air ventilators, lifting hooks etc.				

3	S/ laying of XLPE insulated armoured Copper Conductor cables including cost of lugs, cable glands etc. The cable should be laid on surface with proper clamps (@750mm) or laid & concealed in wall/ floor/ PVC Conduit/ false ceiling complete in all respect. The work also includes cutting chases for conduits in the wall/ floor (Without damaging the building) along with clamping the cable. All connection shall be done thru proper size of lugs				
	4c x 16sq. XLPE mm from Pole to fuse kit kats to the incoming of the Panel.	m	19		
	4c x 10sq. mm XLPE for LHS & RHS VTPN Db's	m	34		
4	LHS Db - Supply, installtion, testing & commissioning of 6way VTPN Db Double door IP 42 complete in all respects for AC, PP & LF as under -Siemens 8GB0406VRC or equivalent as approved by Architect - Location LHS wall behind Fornt cash cabin	Each	1		
	Incomer - 63A 3P - MCB 10kA neutral to be directly connected to neutral bus				
	3no. 32A 1P-MCBs 10 KA - for 1.5 TR AC - MR, 1 o/s MR & 1 LHS area and cash cabin				
	4no. 20A 1P-MCBs 10 KA - Twin PP ckt - 2pp/ckt - 2 for MR & 2cash cabin counter & 1 Router				
	4nos. 10A 1P-MCBs 10 KA for L & F				
	4nos. 6A 1P-MCBs 10 KA for L & F				
	Blanking Plates -				
	All connection shall be done thru proper size of lugs				
5	RHS Db - Supply, installtion, testing & commissioning of 6way VTPN Db Double door IP 42 complete in all respects for AC, PP & LF as under -Semens 8GB0406VRC or equivqlent as approved by Architect	Each	1		
	Location - near pillar on LHS of counters adjascent to officer for back wall				
	Incomer - 63A 3P - MCB 10kA neutral to be directly connected to neutral bus				
	3no. 32A 1P-MCBs 10 KA - 1.5TR AC - 2 & 1 Customer seats behind RHS & 6 officer				
	4no. 16A 1P-MCBs 10 KA - for single PP for 2nos. 2 separate ckts for Pantry				
	3nos. 10A 1P-MCBs 10 KA for L & F				
	3nos. 6A 1P-MCBs 10 KA for L & F				
	Blanking Plates -				
	All connection shall be done thru proper size of lugs				
6	Glow sign Board - Circuit wiring with 2x2.5sq.mm + 1x 1.5sq.mm stranded Cu. conductor (Finolex/Anchor/Skytone) to be laid in 19 mm PVC pipe heavy duty laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The rates should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.The job shall be complete & to the entire satisfaction of the Bank.	m	12		
7	Strong room controlling DP MCB - Circuit wiring with 3x1.5sq.mm stranded Cu. conductor (Finolex/Anchor/Skytone) to be laid in 19 mm PVC pipe heavy duty laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The job also includes supply & fixing of 32A 2P MCB in 2way box including connections with lugs. The rate should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.The job shall be complete & to the entire satisfaction of the Bank.	Job	1		
	E-DG SET SUPPLY				
1	S/laying of 4cx 16sq.mm XLPE insulated armoured Copper Conductor cable from proposed DG set to Changeover switch including its connections at both ends with lugs to be laid in 25mm dia rigid PVC /flexible conduit	m	12		
	F- EARTHING				
1	S/burying of Dual pipe technology (Pipe in Pipe) earthing electrode having GI 80mm O/D pipe with 25 micron coating, 3metres long. The space between two pipes to be filled with Highly conductive & Non corrosive chemical compound. The installation shall be thru earth auger. The vacant space between pipe & hole shall also be filled with compound all around. The job also includes S/F of GI strip clamp with two holes (with SS/GI bolts & nuts) on the electrode & taking two earthing leads of 4mm dia copper wire (Assumed length of 10m - beyond 10m to be paid extra) upto Main panel complete in all respects with guaranteed E/N voltage of less than 2 volts and resistance less tahn 1 ohms. The 4mm dia Copper earth wire shall be terminated on a separate 6way earthlink. The connections for Panel earthing & earth bus in the panel should be taken from this earthlink. (1for power system &1 for UPS). The distance between two earthing pits to be 10ft or more.	Job	2		

2	Supply & Fixing of 4mm dia copper wire on surface or in recess for loop earthing as required earthing to Db's or main panel.if required beyond 10m	m	32		
3	S/F of G I Strip earth clamp	Each	1		
G - SUPPLY & FIXING ITEMS					
1	S/F of Energy efficient recessed mounted LED luminaire - GreenSquare, profiled recess mounted luminaire, energy efficient with longer life, resulting in lower operational cost Panasonic/ Anchor ABL13B367, Philips - RC170B LED29S-6500 PSE WH 220-240V 50Hz / or equivalent Wipro/ Crompton Greaves or any other make approved by Bank/ architect	Each	19		
2	S/F of recessed LED downlighter - Recessed mounted LED down lights Philips BBS170 1xDLED -5000 PSU WH complete in all respects or equivalent Wipro/ Crompton Greaves or any other make approved by Bank/ architect	Each	18		
3	S/F of Surface & wall mounted LED batten - Ultra-slim poly carbonate decorative LED batten with inbuilt heat sink, anti glare polycarbonate diffuser & energy efficient electronic driver 20W 1800 lumens - Panasonic LED Batten light ABT 019206 or equivalent Philips Astra - BN150W LED20S-6500 PSE OD GR or any other equivalent make approved by Bank/ Architect	Each	14		
4	S/F of 1x36watts Fluorescent Tube light surface mounted fitting c/w cost of 1x36w flourscent tube light - Phillips -TARANG ELECTRONIC 4' TMC090 1xTLD36W HF (HPF Batten) complete in all respects	Each	0		
5	S/F of angle holder for bulbs including cost of 15w 1355 lumens output Led bulb - Panasonic - ABU 021157 or equialent Philips - myVision 15W B22 6500K A60 IND	Each	2		
5	S/F of wall mounted fan 400mm sweep - Havells Palatina model or equivalent Bajaj / Crompton/ Alstom/ Usha	Each	9		
6	S/F of ceiling fan 1200mm sweep double ball bearing type - Havells Velocity/ Velocity HS or Equivalent Bajaj / Crompton/ Alstom/ Usha	Each	2		
6a	S/F of electronic modular regulator Anchor 22546 - Fan step regulator Tiny EME 100w	Each	1		
7	Supply & Fixing of fresh air fan 12" - Havells venti Air DSP metallic range model or equivalent Bajaj / Crompton/ Alstom/ Usha	Each	2		
H - Telephone system					
1	Supply & fixing on wall/ furniture/ partition recessed type modular telephone jack single with shutter outlet (RJ-11) with mounting box & front plate complete with chase cutting, mending good etc. as required including Supply & laying of 2 pair unarmoured 0.61mm dia. PVC insulated twisted pairs bunched together telephone cables through rigid 20mm dia PVC conduit as directed by the Bank/ Architect from telephone junction box to telephone socket outlet including interconnection mending good etc. as required complete in all respects.	Each	3		
2	10 Pair Krone box	Each	1		
3	MDS Box	Each	1		
Total Cost of Electrical works					
DATA CABLING					
	Supplying & laying of 25mm dia heavy duty rigid PVC conduit (BIS marked) complete with junction box, circular box, elbows, bends & other accessories as required by chase cutting on wall, through partition or over false ceiling. The work includes making good all damages to original finish, painting etc. as required.	m	75		
	Supply & laying of CAT - 6e cables Giga speed D-Link/ Systimax make through pre-laid rigid PVC conduit as directed by the consultant from Server to Switch, Switch to computer data socket including interconnection mending good etc. as required complete in all respects.	m	163		
	Supply & Fixing of XL RJ 45 toolless information outlet Grey colour cat 6e Giga speed Systimax/ D link make including interconnection with connectors (cost to be borne by contractor) as required complete in all respects.	Each	11		

	Supply & fixing of 7ft Grey colour Patch chord Giga speed Systimax/ D link make	Each	11		
	Supply & fixing of 3ft Grey colour Patch chord Giga speed Systimax/ D link make	Each	11		
	<i>Total for Data/ LAN Cabling</i>				
	TOTAL FOR ELECTRICAL & DATA CABLING				

Air-Conditioning

S.No.	Item	Unit	Qty.	Rate	Amount
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Note;

1. Each vendor to specify the Make of A.C. they propose to supply.
2. Common drain pipes of Cassette / Split A.C.'s be terminated in any toilet Nahni traps OR else be terminated from external wall up to ground. AC's with COPPER Condenser & Evaporator coils only to be supplied.
3. Pl. enclose Technical Brocher of quoted A.C.'s.
4. As built layout drawing of Refrigerant & Drain Piping has to be attached with Final Bill.

Daikin, Hitachi, Voltas, Blue Star 3 Star . AC's with COPPER Condenser & Evaporator coils should only be supplied.

Only one of these Makes to be quoted.

Pl. enclose Tech. Brocher of the quoted Cassette/ Split A.C.

ALL AC TO BE 3 STAR RATING ONLY					
1	High Wall Split AC 1.5 Tonn 3 Star rating	No.	6.00		
	Supply and Installation Of wall mounted split AC 1.5 Ton 3 star.(AC MAKE of -BLUE STAR, VOLTAS, DAIKIN,HITACHI ONLY APPROVAL AS PER ARCHITECT with 5 year warranty on compressor				
2	Copper Piping Refrigerant along with insulator Piping for Hi Wall . 19 G Soft Copper Refrigerant piping with complete fitting, elbows bends supporting arrangements Nissan, Merchant, MET tube, Totaline tube, pressure tested tube above 4 RMT length available with spilt AC machine.	Mts	135.00		
3	Frame Work Supply, Fabrication and installation Of MS base Frame for outdoor unit complete with epoxy painting vibration isolation pads, supports, hangers, railing brackets etc. with cage and locking arrangement.	No	6.00		
4	Drain Water Piping Constructed out of PVC Hard Pipes, fitting, accessories, bends, elbows, tees, hanger, support, anchors, ISI approved Finolex/Prince Make (32mm)	Mtr	125.00		
5	Providing & Installation of 4KVA voltage Stabilizers with range of 130 - 280V of standard make as per the approval of the Architect of (Inmag, Serval,Stambh)	No	6.00		
	TOTAL				

	GRAND TOTAL (ELECTRICAL & AC)				
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Note: All rates are excluding G.S.T.

For GUNJAN & ASSOCIATES

 (Ar. GUNJAN KAPUR)
 PROPRIETOR

Ar. Gunjan Kapur
 (Gunjan And Associates)