## SCHEDULE OF QUANTITIES FOR AIR-CONDITIONING & ELECTRIFICATION WORKS OF BANK OF BARODA BRANCH/ ATM, KARAPARAMBA (ALTERNATE PREMISES)

## (E L E C T R I C A L)

	(E L E C T R I C A L)						
Sl.No	Description	Qty	Unit	Rate	Amount		
1	VTPN MCCB DB						
	Supply, installation, testing and commissioning 6 WAY VTPN Double door type						
	MCCB incomer DB (MDB), dust tight, vermin proof, double door construction						
	with the following:						
	Incomer						
	100A,4pole, 25kA Icu MCCB with thermal magnetic release type with Current						
	setting 80% to 100% for O/L & S/C protection.						
	Outgoing						
	63A, TP_MCB - 1no (PDB - BRANCH)						
	63A, TP_MCB - 1no (SPLITTER DB, BRANCH LDB & UPS)						
	40A, TP MCB - 1no (ATM PDB)						
	16A, SP MCB - 4nos.	1	No.				
2	PDB (Branch)						
	Supply, installation, testing and commissioning of 6 WAY VTPN Double door						
	type MCB DB, dust tight, vermin proof, double door construction with the						
	following:						
	Incomer						
	63A, 4pole Isolator - 1no.						
	63A, 4pole100mA RCCB - 1no.						
	Outgoings						
	32A TP MCB - 1 No. (3 Ton AC)						
	32A/ 25A/ 20A SP MCB - 5 Nos. (2/ 1 Ton AC's)						
	20/ 16A, SP_MCB - 11 nos (Power Plug / Spare)	1	No.				
3	SPLITTER DB (DG)						
	Supply, installation, testing and commissioning 4WAY VTPN Double door type						
	MCB DB (LDB), dust tight, vermin proof, double door construction with the						
	following:						
	Incomer						
	63A, 4pole Isolator - 1no.						
	63A, 4pole100mA RCCB - 1no.						
	Outgoings						
	40A TP MCB - 1 No. (LDB BRANCH)						
	32A SP MCB - 2 Nos. (UPS IN BRANCH)	1	No.				
4	LDB (Branch)						
	Supply, installation, testing and commissioning <b>4WAY TPN Double door type</b>						
	MCB DB (LDB), dust tight, vermin proof, double door construction with the						
	following:						
	Incomer						
	40A, 4pole Isolator - 1no.						
	40A, 4pole 30mA RCCB - 1no.						
	Outgoing						
	10/6A, SP MCB - 12 nos.	1	No.				
L							
5	UPS SPLITTER DB						
	Supply, installation, testing and commissioning <b>4WAY SPN Double door type</b>						
	<b>MCB DB</b> , dust tight, vermin proof, double door construction with the following:						
	40A, DP MCB Isolator - 1no.						
	Outgoings	4					
	25A, SP_MCB - 2 nos.	1	No.				
6	COMPUTER DB						

Sl.No	Description	Qty	Unit	Rate	Amount
	Supply, installation, testing and commissioning <b>12 WAY SPN Double door type</b>				
	<b>MCB DB</b> , dust tight, vermin proof, double door construction with the following:				
	Incomer				
	25A, DP 100mA RCCB - 1no.				
	Outgoings				
	6A / 10A, SP_MCB - 8 nos.				
	25A, DP 30mA RCCB - 1no.	1	No.		
7	CRITICAL DB				
	Supply, installation, testing and commissioning <b>8 WAY SPN Double door type</b> <b>MCB DB</b> , dust tight, vermin proof, double door construction with the following:				
	Incomer				
	40A, DP MCB Isolator - 1no.				
	Outgoings				
	6A / 10A, SP_MCB - 6 nos.	1	No.		
0					
8	<b>PDB (ATM)</b> Supply, installation, testing and commissioning <b>4WAY TPN Double door type</b> <b>MCB DB</b> , dust tight, vermin proof, double door construction with the following:				
	Incomer				
	40A, 4pole Isolator - 1no.				
	40A, 4pole 100mA RCCB - 1no.				
	Outgoing 10/6A, SP MCB - 7 nos.				
	32/ 25A, SP MCB - 3 nos. (AC & UPS IN)				
	25A, DP 30mA RCCB - 1no. (Board light)	1	No.		
9	ATM UPS DB				
•	Supply, installation, testing and commissioning <b>8 WAY SPN Double door type</b> <b>MCB DB</b> , dust tight, vermin proof, double door construction with the following:				
	Incomer				
	25A, DP 100mA RCCB - 1no.				
	Outgoing				
	6A / 10A, SP_MCB - 2 nos.				
	16A, SP MCB - 2 nos. (Machines & power socket)	1	No.		
10	SIGN BOARD DB				
	Supply, installation, testing & commissioning <b>8W SPN double door DB</b> with 2 no.s 16A SP MCB & 2 Nos. Legrand make 24hrs, modular timer (MicroRex-4128) for controlling 8 nos. security light provided ouside the branch & Branch/ATM sign board.	1	No.		
11	Supply and fixing 100A, 4P ON LOAD Change Over Switch (Socomec) for splitter <b>DB (DG)</b> with suitable enclosure etc. complete (powder coated)	1	No.		
12	Supply and laying following Aluminium armoured cables through trench/wall/trays/pipes etc. including supply & fixing of necessary clamping materials, if any required.				
12a)	4C x 35sqmm Aluminium armoured cable (MB to MDB in Elec. room)	55	М		
,	4C x 16sqmm Aluminium Cable. (MDB to Master Control, Master Control to PDB, MDB to Splitter DB (DG)	85	M		
12c)	4C x 10sqmm Aluminium Cable. (MDB to LDB)	20	M		
	3C x 2.5sqmm copper cable (Branch Glow Sign Board)	75	M		

Sl.No	Description	Qty	Unit	Rate	Amount
13	Supply of all materials and providing cable end termination, including gland earthing etc. as complete with suitable gland and copper crimping sockets for				
	the following sizes of cables.				
	4C X 35 sqmm Aluminium Cable	2	No.		
	4C x 16sqmm Aluminium armoured cable	8	No. No.		
	4C x 10sqmm Aluminium armoured cable 3C X 2.5sqmm copper cable (Branch Glow Sign Board)	2 4	NO. No.		
100)		-	110.		
14	Supply and fixing <b>25A DP 100mA RCCB</b> in suitable sheet steel enclosure for UPS incomer.	2	No.		
15	EARTHING CONDUCTORS Supply, fixing and giving termination to the following cu. strips and wires for				
	effective earthing of the system				
15a)	No.10swg cu.	185	м		
,	No.8swg cu.	155	M		
	Supply and laying of <b>2runs 16sq mm</b> pvc insulated multi stranded copper wire through 25mm ISI marked medium duty PVC conduit with all accessories for	85	М		
15d)	UPS earth for Branch & ATM Copper Earth Bench made out of 25 x 6 mm Copper and duly tinned to take multiple Earth Connections to DBs.	2	No.		
16	EARTHING				
16a)	Supply & providing efficient pipe earthing using 50mm x 2.5m long GI pipe with necessary earth pit, watering funnel including filling pit with charcoal, salt etc., cement				
	concrete (equivalent construction), concrete/Cl cover including civil work, cu. strip connection from top to the plates etc., complete as required. (ATM/ Pass Book Printer Body Dedicated Earth & EB side - 2Nos)	3	No.		
16b)	Supply & providing efficient plate earthing using <b>600 X 600 X 3mm Cu.</b> earth electrode with necessary earth pit, pipe connection including filling the pit with charcoal, salt etc. cement concrete or equivalent construction including civil work & cu. strip connection from top to the plates, concrete cover etc., complete as per IS-3043/1987 (Branch UPS & ATM UPS)	2	No.		
47					
17	WIRING Supply all materials & wiring recess/surface through wall, floor, ceiling etc. as				
	per colour code with 1.5 sq. mm PVC insulated FRLS stranded Cu. wire for the points & 1.5 sq.mm PVC insulated green colour stranded. Cu. Wire as continuous Earth for points with independent Earth wire for each circuit through ISI grade 20/25 mm PVC conduit including all accessories as per IS : 9537 part				
	Il including circuit wiring using 2.5 sq.mm Pvc insulated stranded Cu. wire for phase neutral & Earth with all materials & installation of factory made MS boxes,				
	2 plate model modular switches & 3 plate ceiling rose/connectors / angle holders etc. of approved make for electrical fixtures. No of cables in conduit				
	should be limited to the IS standards & as per the conditions laid down in the				
	Tender. Check nuts to be provided in the conduits in switch boxes, DB etc. The rate includes circuit wiring & no cost is allowed for additional length of circuit				
	wiring				
17a)	One light/exhaust/bell point controlled by one switch	35	Set		
17b)	Two light points controlled by one switch	18	Set		
	Four light points controlled by one switch	2	Set		
17d)	Supply all materials & wiring recessed/surface from Vertical DB to the main				
	Entrance through wall, floor, ceiling etc. as per colour code with 3 runs of 2.5 sq. mm PVC insulated Cu. wire PVC conduits including switches with all accessories. (Light points at the Entrance & inside the Banking hall even after turning off the Light DB. Direct Circuit)	3	Set		
	turning off the Light DB - Direct Circuit)				

Sl.No	Description	Qty	Unit	Rate	Amount
17e)	Supply and wiring <b>wall fan/ exhaust fan points</b> concealed using 3 Runs 1.5 sqmm pvc insulated copper wire (includes one run of green colour copper wire for earth) including supply and fixing 5A socket on metal concealed box with modular switch. <i>Maximum wiring length up to 5Mts</i>	13	No.		
17f)	Supply & wiring ceiling <b>fan points</b> concealed using 3 Runs 1.5 sqmm pvc insulated copper wire (includes one run green colour copper wire for earth) including supply & fixing 250W electronic STEP regulator on metal concealed box with modular switch. <i>Maximum wiring length up to 5Mts.</i>	5	No.		
17g)	Supply, wiring and installation of <b>Calling bell</b> in manager's cabin using 1.5 sq.mm PVC Cu. Wire through 20 mm PVC pipe with modular bell push	1	No.		
17h)	Wiring for <b>UPS light point</b> using 3 runs of 2.5 sq.mm PVC Cu. wire through 20 mm PVC pipe	10	No.		
17i)	Supply and wiring <b>security light points</b> outside building concealed using 3 Runs 1.5 sqmm pvc insulated copper wire (includes one run of green colour copper wire for earth). These shall be provided from ATM PDB	7	No.		
18	Supply and wiring for <b>6A 2/3 pin combine socket</b> using 3 Runs 1.5 sqmm pvc insulated copper wire including supply and fixing of 6A modular switch and 2/3 pin combine socket on metal concealed box. <i>Maximum wiring length up to 5Mts</i>				
	In independent position	16	No.		
18b)	In combined position	7	No.		
19	POWER /UPS SOCKETS				
	Supply all materials & wiring recessed/surface through wall, floor, ceiling etc. as per colour code with 3 runs of 1.1 KV grade 2.5 sq. mm PVC insulated Cu. wire for phase neutral and green colour for Earth through ISI marked 20 mm PVC conduits with all accessories and supply & installation of modular 6/16A plug with switch for <b>Power points</b> . The rate should be quoted considering the average length required for wiring from DB & no claim for additional length. (2 nos Cash counter, 1no Strong room, 1no. U - Rack, 1no. in dining space & 1no. Branch head's cabin)	8	No.		
	Supply all materials & wiring as per colour code with 4 runs of 1.1 KV grade 4 sq. mm PVC insulated Cu. wire for phase neutral and 2.5 sq.mm green colour for Earth through ISI marked 20 mm PVC conduits with all accessories, supply & installation of <b>40A 4 pole MCB</b> Isolator with suitable Metal/ Syntex enclosure for <b>3 Ton Cassette AC</b> units. The rate should be quoted considering the average length required for wiring from DB & no claim for additional length. (Inside the Banking hall)	1	No.		
19c)	Supply all materials & wiring as per colour code with 2 runs of 1.1 KV grade 4 sq. mm PVC insulated Cu. wire for phase neutral and 2.5 sq.mm green colour for Earth through ISI marked 20 mm PVC conduits with all accessories & supply & installation of modular type <b>20A metal clad plug &amp; socket</b> for <b>AC units</b> . The rate should be quoted considering the average length required for wiring from DB & no claim for additional length. (Inside Branch Heasd's cabin, Banking hall, ATM, etc.)	6	No.		
19d)	Supply all materials & wiring recessed/surface through wall, floor, ceiling etc. as per colour code with 2 runs of 1.1 KV grade <b>6 sq. mm</b> PVC insulated Cu. wire for phase neutral and 4 sq.mm green colour for Earth through ISI marked 20 mm PVC conduits with all accessories for UPS input/output supply/ 3 kVA single phase generator	60	Μ		
19e)	Supply all materials & wiring recessed/surface through wall, floor, ceiling etc. as per colour code with 3 runs of <b>2.5 sq. mm</b> PVC insulated Cu. wire PVC conduits with all accessories for Board light/ supply.	45	М		

Sl.No	Description	Qty	Unit	Rate	Amount
20	WIRING FOR COMPUTER WORK STATIONS				
	Supply all materials & wiring through recessed/surface through wall, floor, ceiling etc. as per colour code with 3 runs of 2.5 sq. mm PVC insulated stranded Cu. wire for phase neutral and green colour for Earth through ISI marked 20 mm PVC conduits from DB for Computer Workstation, including supply & installation of 3 nos. 6A 3 pin plug & socket with 3 nos. switches in metal boxes including chipping the floor, plastering etc. if necessary.	12	No.		
21	POWER POINTS				
21a)	Supply & fixing <b>25A</b> 3pin socket & switch with Power plug, M.S box & all internal connection etc., complete (for <b>Strong Room</b> ) Legrand-Myrius Item No. 6730 15 & 6730 47	1	No.		
	Supply & fixing <b>6A</b> 3pin socket & switch, M.S box & all internal connection etc., complete (Strong Room-UPS Light)	1	No.		
21c)	Supply & installing <b>40A DP MCB Isolator</b> in a suitable steel enclosure (factory make) and giving connection etc., as complete. (UPS Input & Output of Branch - 3nos., ATM - 3nos. & all A/C points ODU - 7nos.)	12	No.		
22	MASTER SWITCHES				
	Supply and installation of <b>40A 4P MCB Isolator</b> in a suitable double door steel enclosure (8Way Double door MCB DB) (factory make) and giving connection etc., as complete. (For LDB - Entrance of Branch & PDB (Branch) - Outside of UPS room.	2	No.		
23	Supply and installation of <b>32A-DP Modular switch</b> with indication & MS box (concealed) giving connection etc., as complete {AC points for manager & Water Pump (Optional)}	5	No.		
24	Supply and fixing 3 nos LED indicators with suitable 3 Hole Essbee Sintex type boxes etc. complete for banking hall KSEB indications.	1	No.		
25	LUMINARIES, FANS & CALL BELL				
	Supply, installation, testing and commissioning of the following luminaries/fans using suitable mountings, 3 core extension wire, flexible conduit, cool white lamps MS tube down rods /chain etc. complete as required.				
25a)	Recessed mounting LUMINAIRE with <b>36W Full glow LED lamp with frame</b> , Havells - Plano 2'x2' CAT.NO. PLANO 36W LED 857	17	No		
	Recessed DOWN LIGHT 18W LED, Havells-Integra-Neo (DLR 18W LED 857 S)	3	No		
	Recessed DOWN LIGHT <b>10W LED</b> , Havells-Integra-Neo (DLR 10W LED 857 S)	24	No		
	Recessed LED SPOT LIGHT 3W LED, Havells 1x20W LED Tube light with fixture (WIPRO OR PHILIPS)	8 15	No No		
	Angle Holder with 6 Watt LED Lamps (Philips)	5	No		
	Ceiling Fans 1200mm ( <b>Crompton HIGH SPEED</b> ) Colour - Ivory (Including supply & fixing Anchor Fastener on RCC slab & fan hook)	5	No		
25h)	Oscillating type wall fans 400mm( <b>Crompton-HIGH FLOW</b> )	10	No		
	300mm light duty exhaust fan (Almonard)	2	No		
	450mm heavy duty exhaust fan <b>(Almonard)</b>	1	No		
	1x11W CFL Decorative luminarie with lamp (for CASH COUNTER) Philips FMC300/111	1	No		
,	LED Strip light IP 20 4.5 watts /Mtr with drive - Philips make.	10	M		
25m)	Call bell Electronic for Manager's Cabin (GM make.)	1	No		
	<b>TELEPHONE POINTS</b> Supply and drawing of <b>2runs of 10 pair</b> 0.5mm telephone wire upto Terminal connectors through 25mm dia. ISI marked medium duty Conduits and accessories.	70	М		

Sl.No	Description	Qty	Unit	Rate	Amount			
26b)	Supply, installation, testing and commissioning of <b>20pair</b> telephone terminal box. The terminal box shall be with sheet steel enclosure and Krone connector	1	No.					
,	Supply all materials & wiring recessed/surface through wall, floor, ceiling, partitions etc. using 4 pair 0.5 mm telephone cable in 20 mm PVC conduit from the exchange concealed wall, floor, partitions etc. including the cost of modular 2 plate type telephone jack RJ-11 mounted in metal boxes, one separate cable for each point. No. of cables in one conduit limited to three. The rate is for average length & no cost is allowed for additional length.	12	No.					
27	DATA CABLING AND RELATED WORKS							
	Supply & laying of 20mm casing capping / 25mm / PVC conduit for laying UTP cable. Supply and laying of <b>CAT- 6, 4 pair UTP cable</b> through existing 20mm PVC	250	М					
	conduit (D-link/AMP)	470	M					
27a)	Supply and installation of CAT- 6, 24 port patch max panel (D-link)	1	No.					
	Supply & fixing wall mount <b>9U rack 500mm deep</b> with cable managers - 4 nos, Power strip with 5/15A combined - 2 Nos, cooling fan- 2 nos, Hardware pack of 10 - 2 packet (size-9U), acrylic cover stationery shelf, 16 port 10/100 Mbps fast Ethernet switch (unmanaged), etc. complete. <b>(D-link)</b>	1	No.					
,	Supply & fixing of Patch code,CAT-6 -1 M	16	No.					
	Supply & fixing Patch code, CAT-6 - 2 M	16	No.					
	Supply & fixing <b>RJ 45 Data Information Outlet socket</b> (CAT-6) outlet on MS box & giving connection etc., complete	16	No.					
28	Supply and laying of PVC conduit/ pipe and all PVC accessories for laying of Computer cable							
	20mm dia. for laying of Computer cable	40	M					
28b)	25mm dia. for laying of Computer cable	40	М					
	Supply and providing 1/4" thick electrical grade rubber mat (size 2mtrX1mtr) in front of the panels as required.	1	Set					
30	Supply and providing Shock treatment chart.	1	No.					
31	Supply and installation of cable tray and supports using MS angles and flats of adequate size painted with one coat of zinc chromate primer and two coats of	10	KG					
32	MISCELLANEOUS WORK							
JZ	Expenses for liaison work with the KSEB for getting connection for the installation.	1	JOB					
	ELECTRICAL SU	JB - ТС						

Sl.No	Description	Qty	Unit	Rate	Amount	
	(AIR-CONDITIONING)		•	•		
1	<b>PART - A (HIGH SIDE)</b> Supply of Hi wall split air conditioners with reciprocating/ rotary compressors having minimum <b>star rating of 3 (invertor type)</b> with cordless remote controller of following capacities with copper piping, insulation and electrical cable, vibration isolation pads and outdoor unit support					
1a	1.00 TR (copper series) (supplied by the Bank)	2	Nos			
2	Supply of Ceiling Suspended Cassette air conditioner with reciprocating/ rotary compressors, cordless remote controller <b>(invertor type)</b> of following capacities with copper piping with insulation and electrical cable, vibration isolation pads and outdoor unit support					
	2.00 TR	2	Nos			
2b	3.00 TR	1	Nos			
3	Supply Installation testing and commissioning of following capacity stabilizers for split units 4 KVA ( <i>supplied by the Bank</i> )	2	Nos			
Vu		_				
	PART - B (LOW SIDE)					
1	Supply of all materials, Insulation, pressure testing, vacumissing and commissioning of the following high wall split / cassette type air-conditioning units and all accessories, refrigent gas and oil, control panel, etc. complete for following units					
	1.00 TR	2	Nos			
-	2.00 TR cassette	2	Nos			
	3.00 TR cassette	1	Nos			
-,	Supply, Installation, Testing and commissioning of soft drawn copper refrigerant piping (including suction and discharge)					
2a	Suction line for 1.00 TR (HW type IDU)	10.00	RM			
2b	Discharge line for 1.00 TR (HW type IDU)	10.00	RM			
	Suction line for 2.00 TR (Cassette type IDU)	20.00	RM			
	Discharge line for 2.00 TR (Cassette type IDU)	20.00	RM			
	Suction line for 3.00 TR (Cassette type IDU)	12.00	RM			
	Discharge line for 3.00 TR (Cassette type IDU)	12.00	RM			
	Supply and Installation of control cables interconnecting indoor and outdoor					
	units of hi wall units	20.00				
	1.00 TR (HW type IDU)	20.00	RM			
	2.00 TR (Cassette type IDU) 3.00 TR (Cassette type IDU)	40.00 25.00	RM RM			
<b></b>	Supply, Installation, testing and Commissioning insulated Rigid PVC Drain piping insulated with nitrile rubber (25mm dia)	70.0	RM			
5	Supply, Installation, testing and commissioning MS angle frame/brick pedestal structure for outdoor unit support with vibration pads. Total structure shall be finished with enamel paint.					
	1.00 TR	2	Nos			
	2.00 TR cassette	2	Nos			
5c	3.00 TR cassette	1	Nos			
	AIR-CONDITIONING SUB - TOTAL ₹					

Sl.No	Description	Qty	Unit	Rate	Amount				
	GRAND TOTAL EXCLUDING GST ₹								
NOTE:									
SPLIT	AIR CONDITIONERS (WITH ODU STANDS) SHALL BE SUPPLIED BY THE BANK								
THE R.	ATES SHALL INCLUDE ANY WALL CUTTING WORK NECESSARY FOR LAYING PIPES, ETC.								
THE W	ALLS SHALL BE MADE GOOD AFTER SUCH WORKS ARE DONE.								