

B	ELECTRICAL WORK		Quantity	Unit	Rate (Rs.)	Amount
1	1	<p>Design, Manufacture, Supplying and Commissioning Main LT Panel MS 3' X 4'Distribution Board of 1.6mm thick MS sheet fabricated cubicle type with Danger Notice Board indicating sign (DANGER) in English, Hindi, Pinjabi. , wall mounted fully recessed / partly recessed with dust proof hinged and lockable doors, brass cable glands for incoming and out going connections with inter connections with copper tapes /wires consists of following:-</p> <p>(i) A cubical having 100 Amps TPN(Before bus bar) breaking current 20KA, 100 Amps TPN Bus Bar(Copper Tinned), voltmeter, ammeter & Digital power factor meter , three indicators, C.Ts. with selector switches & backup fuses (HRC type)</p> <p>(ii) 100 Amps 4 Pole Heavy duty on load change over switch-1 No.</p> <p>(iii) 63 amps 3 phase and neutral 6 way lighting D.B. with suitable rated 6/10/16 Amps SP MCB-8 Nos(for switch board wiring), 32/40Amp DP MCB-3 Nos.(1 for ATM UPS i/p, 2 Spare)</p> <p>(iv) 63 Amps 3 phase & neutral 6 way power DB with suitable rated 32/40 Amps DP MCB-9 Nos. (7 for AC ckt 2 spare) 20 Amps SP MCB-10 Nos (8 nos for 16A plug point each separate wiring, 1 for glow sign, 1 spare)</p> <p>(v) 63 Amps FP ELCB-1 Nos. for LDB & 63 Amps FP ELCB-1 No. for PDB, ELCB of 30MA having 30 m Sec. Sensitivity (Complete as per technical specifications and including earthing of each Electrical equipments)</p> <p>(vi) LT Panel labeling using aluminium strip for section wise load distribution (Complete as per technical specifications and including earthing of each Electrical equipments)</p> <p>MCB- L&T/Legrand/Schneider Acti-9/Siemens-Betaguard/MDS/Havells, MCCB-L&T (D-sine)/Seimens (3WL)/ Schneider(NSX) / Legrand (DPX3)/ABB, Wires/Cables-Finolex/Polycab/Havells/greatwhite,LT/CTs (CAST RESIN -- KAPPA / AE, Selector Switch-- SIEMENS / SALZER / KAYCEE/HAGER, KWHR. Meter- CONZERV/ NEPTUNE,Digital Multifunction Meter : CONZERV/ AE, Indicating Lamp with LED : SIEMENS / L&T/SCHNEIDER, Push Buttons : SEIMENS / L & T/ SCHNEIDER , Contactors, 500 V : L&T/TELE MACHNIC FRANCE / SEIMENS (to Confirm IEC Specs.), Over Load Relay to Confirm : TELE MACHNIC FRANCE / SIEMENS (IEC Specs),Over Load Relay to Confirm : TELE MACHNIC FRANCE / SIEMENS (IEC Specs), Capacitor bank : L&T / Neptune, Lugs, Thimbles Etc:Dollars/ DOWELLS/Hansel, Power Factor Relay : DUCATI / CONZERV / MEHER, Change over switch : L & T/ GE/ ABB</p>	1	EACH		
	1.1	3 Phase to single phase selector switch of 40ampere for UPS supply line. This selector switch to be connected in main panel after 63 Amps TPN ELCB -1No. For UPS input circuit from where UPS input wire is to derived. Basic purpose of this selector switch is to select the any of the R, Y, B phase for UPS input supply line in case of any particular phase failure.	1	EACH		
2		<p>Wiring for light points with 2x1.5sqmm and PVC insulated copper conductor wire of 650/1100 volts grade in concealed / exposed PVC pipe, including by 5 Amp piano type modular switch with MS boxes, including making all the connections, including cutting chases and making good the surfaces wherever required. (This also includes SPMCB of Main panel to switch board wiring of minimum 4 sq mm copper wire and non of the switch boards circuit wiring to be paralled. Each switch board must be fed from separate circuit wiring fromSPMCB of the Main panel)</p> <p>Wires/Cables-Finolex/Polycab/Havells, Modular Switch/SOCKET-MDS/NORTHWEST/L&T/LEGRAND/MK</p>				
3	3.1	Each Light point controlled by one 6 amps modular type switch.(Prpoer care must be taken for neutral return line and not more than two switches return line is to be looped or paralled). Wires/Cables-Finolex/Polycab/Havells, Modular Switch/SOCKET-MDS/NORTHWEST/L&T/LEGRAND/MK	30	EACH		
	3.2	Wiring for 5Amp light plug points with 2x1.50+1.50 sqmm & PVC insulated copper conductor wire of 650/1100 volts grade with PVC insulated Copper earth wire in concealed / exposed PVC pipe,,including 5pin 5Amp Socket with modular switch with MS boxes with earthing the third points, including cutting chases and making good the surfaces wherever required. Wires/Cables-Finolex/Polycab/Havells, Modular Switch/SOCKET-MDS/NORTHWEST/L&T/LEGRAND/MK				
	3.3	Light Plug Point in Counter/Wall/Partition (in 3Module PVC box with plate) (2 Socket 1 switch DIRECT) One for every two seats Wires/Cables-Finolex/Polycab/Havells, Modular Switch/SOCKET-MDS/NORTHWEST/L&T/LEGRAND/MK	10	EACH		
	3.4	Light Plug Point for Wall/ Bracket/ EXHAUST Fan Wires/Cables-Finolex/Polycab/Havells, Modular Switch/SOCKET-MDS/NORTHWEST/L&T/LEGRAND/MK	9	EACH		



4		16 Amps switch socket wiring.(Power Points) :-Wiring for Power circuit with 2x4 sqmm + 1x1.5 sqmm earth wire.				
	4.1	Wiring for 16Amp (Socket board 2 no. 16A, 6-pin socket with 2 nos 16A switch) power plug points with 2x4+1.50 sqmm PVC insulated copper conductor wire of 650/1100 volts grade with PVC insulated copper earth wire in concealed / CONCEALED PVC pipe, including 2 no. 6pin 16Amp Socket with 2 no. 16Amp modular switch with MS boxes with with earthing the third points, including cutting chases and making good the surfaces wherever required. There must be separate circuit wiring for each point & this circuit wiring must not be paralled/looped with switch board of light/plug points. (Location: Pantry, water cooler, Manager cabin-1nos, Cash cabin-1no, for each two counter one 16A plug point for winter) THIS POINT MUST BE PROVIDED ON THE WALL NOT ON THE WORKING COUNTERS Wires/Cables-Finolex/Polycab/Havells, Modular Switch/SOCKET-MDS/NORTHWEST/L&T/LEGRAND/MK	8	EACH		
5		Fan				
	5.2	Ceiling fan:- Supply, fixing and installing the 56 inch diameter, 3 blade, 230 VAC, 50 Hz ceiling fan complete with the motor, starting capacitor, fan assembly, hang pipe, domes,(top & bottom) Regulator, Rubber bush, required hardwares etc. The work involved the assembly testing, installation from ceiling, connecting & commissioning of the fan at site. (Make- BAJAJ, KHAITAN, CROMPTON GREAVES)	4	EACH		
	5.3	Wall Fan :- 400mm sweep, oscillating type, 3-speed pull control, single piece type propeller Wall/Brackets fan (Supply & Fixing) (Make-BAJAJ, CROMPTON GREAVES, HAVELLS)	9	EACH		
6	6	Wiring for Air Conditioners points with 2x4+4sqmm PVC insulated copper conductor wire of 650/1100 volts grade with PVC insulated copper earth wire in concealed / exposed PVC pipe, including Concealed Industrial Metallic Socket with 20/32Amp 5P MCB housed in MS sheet box with PVC insulated Copper earth wire. Work is also including circuit wiring & cutting chases and making good the surfaces wherever required. (Circuit Shall not be paid extra)There must be separate circuit wiring for each point & this circuit wiring must not be paralled/looped with switch board of light/plug points. The MCB for AC should not be at height more than 5' and 3 pin power socket should be near to AC. (2 nos in ATM cabin and 4 nos in Banking Hall) Wires/Cables-Finolex/Polycab/Havells, Industrial Switch/SOCKET-NORTHWEST/L&T/LEGRAND	7	EACH		
	6.1	Metal clad Plug/Socket with 40Amps MCB for UPS I/P and O/P Points & for AC	2	EACH		
7	7	Call-bell point wiring including Ding-dong bell with 1.5 sqmm multi strand PVC copper wire including plate switches for Manager Cabin, & Outside Main Gate. (Make: Anchor / Havells)	1	EACH		
8		FIXTURE: Lighting Fixture Supply & Installation: Supply, unpacking, assembling, testing, fixing, connecting and commissioning the following luminaries required for internal wiring of the bank premises complete in all respect.				
	8.1	Ceiling Recessed full glow LED Down light for 2'x2' grid ceiling 36W with glare free end to end diffuser complete with all accessories & constant current electronic driver. Diffuser must be complete/end to end for better light distribution. Crompton Greaves Model LCLTR-36-FO-CDL, Polycab Model-PCGLLL 36W, Philips model-rc380BLED 6500, Wipro Model CRCO11RO38HP57	14	EACH		
	8.2	Surface mounted Box type 1 x 28watt T-5 lamp channel luminaires suitable for 1 x 28watt energy saving tube lamp complete with box type fixtures including lamp, electronic choke (Low losses & improved power factor) and lamp holder etc. along with erection of the same with connections, testing etc. complete in all respects as approved and desired by the Engineer-in-charge at site of Philips cat no. TMS122 M 1xT5-28W EBT or Crompton cat no. T5RSF28EB or equivalent	9	EACH		
	8.3	LED 15 Watt round down lighter of Crompton Greaves Model, Philips, Wipro make or equivalent (To be fixed in the Gypsum not in the Grid ceiling)	2	EACH		
	8.4	1x12WCFL lamp complete with jumbo holders wipro make in toilet/UPS room including all necessary fitting and wiring (Toilets, Pantry and UPS area) Make- Philips,wipro,	3	EACH		
9		Telephone Points:				
	9.1	Wiring for Telephone points with 4 pair 0.61 mm Taped Copper wire with PVC pipe with 2 pin Telephone outlet (Anchor Roma) in modular type cover. (Please note that this TELEPHONE wiring is to done from MDF to Router location with minimum four pair wire)	5	EACH		
	9.3	Lockable MDF (50 Pair) for Telephone/Lease & ISDN line. This MDF must be installed at the Branch entrance location and all the telephone line should start from this MDF.	1	JOB		
10		UPS				



10.1	Wiring for UPS points with 2x2.50 +1x1.5 sqmm PVC insulated copper conductor wire of 650/1100 volts grade with required earth wire with concealed / exposed PVC pipe, including making all the connections, including cutting chases and making good the surfaces wherever required. including the cost of computer socket board, with 3nos 5Amp 5 pin sockets with 1no. 5Amp switch 1no. fuse and 1 no. light indicator with modular switchboard. (max. two points on each circuit, Circuit shall not be paid extra, However cash cabin point & Router point should be independently fed from single SPMCB of UPS DB) Wires/Cables-Finolex/Polycab/Havells, Modular Switch/SOCKET-MDS/NORTHWEST/L&T/LEGRAND	11	EACH		
10.2	6 way Double-Door TPN Distribution Board for UPS supply fitted with Metal clad Plug/Socket with 40Amps MCB for UPS I/P and O/P Points:- i. 63 Amps TPN ELCB -1No. (To be installed in the Main Panel from where UPS DB wire to be derived up to selector switch) ii. 63 Amps DPMCB -2 Nos. for UPS input supply including ups PANEL input wiring of minimum 6sqmm copper wire of phase, neutral & Earth wiring from main panel to i/p DPMCB iii. 32 Amps DPMCB -1 Nos. for UPS output iv. 6/10 Amps SPMCB - 7Nos. Make specification as per point-1	1	EACH		
11	EARTHING SYSTEM:				
11.1	Copper Plate Earthing Station:- Supply, Assembling installing, Testing and commissioning all the items for constructing copper plate earthing station comprises of one no. copper earthing plate 600 x 600 x 3 mm thick, 25 mm dia medium class GI Watering pipe (minimum 4.5 mm deep) GI funnel with stainless steel wire mesh strainer, concrete watering chamber with RCC to cover up the watering pit, 100 kgs of common salt, 200kgs of fire charcoal powder, earthing conductor size 25mm x 3mm from the plate to the ground level as per the revised IS 3043 standard, required hardware & miscellaneous items. The work involves digging pit in the soil, burying the earth conductor plate, installing the watering pipe, back filling the soil and constructing the water pit.(FOR UPS & ATM MACHINE BODY AND UPS SOCKET/ POINT WIRING ONLY)	1	EACH		
11.2	GI Plate Earthing Station:- Supply, Assembling installing, Testing and commissioning all the items for constructing GI plate earthing station comprises of one no. GI earthing plate 600 x 600 x 6 mm thick, 25 mm dia medium class GI Watering pipe (minimum 4.5 mm deep) GI funnel with stainless steel wire mesh strainer, concrete watering chamber with RCC to cover up the watering pit, 100 kgs of common salt, 200kgs of fire charcoal powder, earthing conductor size 25mm x 3mm from the plate to the ground level as per the revised IS 3043 standard, required hardware & miscellaneous items. The work involves digging pit in the soil, burying the earth conductor plate, installing the watering pipe, back filling the soil and constructing the water pit.(FOR MAIN PANEL BOARD, FOR UPS NEUTRAL GROUNDING, LIGHTING & POWER CIRCUIT EARTHING)	1	EACH		
11.3	Earthing Conductors:- Wiring with 1x10sqmm PVC insulated copper conductor wire of 650/1100 volts grade (FINOLEX make flame guard Quality) as earth wire with concealed/ CONCEALED PVC pipe including making all the connections. (Please Note that this earth wire from copper earthing point should terminate to UPS distribution panel and it should be connected to earth point of UPS socket only & earth wire from GI Plate earthing should terminate to Main electricity panel & UPS NEUTRAL EARTHING) In no case UPS neutral earthing(to be connected to GI earthing) and UPS point wiring earthing(to be connected to GI earthing) should be common. Due to this UPS neutral should be earthed to GI earthing however for UPS piont wiring only Copper earthing to be used.	30	MTR		
12	CABLES				
12.1	Main Wiring with 4x35 sqmm flame proof PVC insulated aluminium conductor armoured CABLE of 650/1100 volts grade with required earth wire with concealed / exposed PVC pipe, including making all the connections, including cutting chases and making good the surfaces wherever required.(WITH PROPER COLOUR CODING FOR RYBN CONDUCTOR) Havells / Polycab	30	MTR		
12.2	P/F generator wire 16mm 4- core Alum. Cable.	0	MTR		
13	Glow Sign Board pt. Wiring:- 2 x 4 sqmm + 1 x1.5sqmm multi strand PVC copper wire in PVC Pipes. This is to be connected to one of SP or DP MCB of the Main Panel. Wires/Cables-Finolex/Polycab/Havells	20	MTR		



15	FOR ATM UPS INPUT POINT at ATM ups location(in form of 2 nos of mettalic socket plug point with 2 nos 32Amp SPMCB): Wiring for connecting 2x2KVA ATM UPS with 2x6+4 sqmm PVC insulated copper conductor wire of 650/1100 volts grade with PVC insulated copper earth wire in concealed / exposed PVC pipe, including Concealed Industrial Metallic Socket with 2x32Amp SP MCB housed in MS sheet box with PVC insulated Copper earth wire. Work is also including circuit wiring & cutting chases and making good the surfaces wherever required. (Circuit Shall not be paid extra)There must be two mettalic socket on one circuit wiring of 2x6+4sqm copper wiring & this circiut wiring must not be parralled/looped with switch board of light/plug points. 2x6+4sqm copper wiring should be derived from Main panel not from the UPS panel.	2	NO	
		Total		

The contractor is strictly advised to use the makes specified/approved & specification provided by the Bank/Architect, unspecified items will not be paid until they are changed with the specified ones.

Note: No Electrical Points to be provided in ATM Room. All the Electrical points/switches of ATM must be porvided inside the Branch. All switches should be operated from Branch only.

