

**ESTIMATE ELECTRICAL, DATA & TELEPHONE & AC (PIPING WORK) WORK FOR SBI,
OSIAN BRANCH**

S. No.	ITEM	UNIT	QNT.	RATE	AMOUNT (Rs.)
GROUND FLOOR					
ELECTRICAL WORK:-					
1.	LIGHT & FAN POINTS:-				
	P & F light points, fan points, call bell points, sockets etc. with 2 X 1.5 sq. mm. PVC insulated 1100 V grade FRLS, copper conductor wires and 1.0 sq. mm copper earth wire in concealed / surface using ISI mark medium gauge PVC pipes of 20 mm / 25 mm dia 1.50mm thick conduits accessories such as bends, tees saddles, draw boxes, mounting boxes, innerplates, cover plates, ceiling rose etc. (where ever required) and plug etc. The circuit wiring starting from DB to point control box / switch box using 2 X 2.5 sq. mm and 1.5 sq. mm earthing PVC insulated wiring color code to be provided. Identification ferrules at both end to be provided. (Flexible conduit / elbow NOT allowed). The conduits to be fixed in ceiling with proper clamps / wall / floor and felling the chase with cement mortar and finish the same in original form / wooden partition / above false ceiling with proper clamps (Wherever required as per standard specifications)				
	MCB/ MCCB - LEGRAND/ SCHNIEDER/ SIEMENS				
	SWITCH & SOCKET - NORTH WEST/ MK				
	Notes:-				
	All wires shall be FRLS only				
	All material shall be approved make as mentioned in the tender.				
	Color codes must be maintained				
	No flexible conduit & elbows will be allowed.				
	Each circuit shall have independent earth wire.				
	Each point must be separately earthed.				
	Circuit wiring is to be included in point wiring rates.				
	One S.B. can have max. 6-10 switch including 6 Amp. Socket				
	Boxes fixed in the wooden/ plywood partitions may be PVC				
(a)	One point controlled by one 6 Amp. Modular switch & switch board at SB level	Nos.	20		
(b)	Two and three point controlled by one 6 Amp. Modular switch & switch board at SB level	Nos.	30		
(c)	Wall fan point controlled by one 6 Amp. Modular switch & switch board at SB level and 6 Amp. 3 pin socket at designed place.	Nos.	10		
(d)	6 Amp. Socket with switch & light indicator at switch board places.	Nos.	10		
(e)	Call bell point with anchor make Ding Dong Bell	Nos.	1		
(f)	One ceiling fan point controlled by one 6 Amp. Modular switch & switch board at SB level with 5 step electronic regulator.	Nos.	2		
(g)	Exhaust fan point controlled by one 6 Amp. Modular switch & switch board at SB level	Nos.	2		
(h)	Emergency Light point (On UPS) (Including separate phase, neutral, earth) and to be in separate switch boards.	Nos.	15		
2.	POWER POINTS :-				
	Same as item no. 1, but wiring for 16 Amp. 6 pin sockets by using 4 sq. mm PVC insulated copper conductor wire with independent 2.5 sq. mm earth wire from D. B. to first 1st socket and 1st socket to 2nd socket with 2.5 sq. mm and 1.5 sq. mm earth wire including providing and Fixing complete in all respects.				
(a)	Power point (Direct) with 4.0 mm copper conductor wires.	Nos.	12		
(b)	Power point (Loop) with 4.0 mm copper conductor wires.	Nos.	12		
3.	A. C. POINTS :-				
	A.C. point wiring with 2 X 6.00 sq. mm copper conductor & 1 X 2.5 sq. mm copper conductor from AC DB to AC point in 16 swg GI conduit ac point including supplying and fixing of module A.C. Box with 25/32 Amp. MCB. (Wiring must be from DB to stabilizer to MCB near indoor unit to Indoor Unit.)	Nos.	8.00		

4	P & F sheet metal distribution boards of approved make double door type and making necessary connections etc complete. LEGRAND/ SCHNEIDER/ SIEMENS				
	All MCB'S must be 'C' series, 10 KA				
(a)	T P N 4 WAY DB :- (For Lighting) Having Incomer : 40 Amp. 4-P MCB OUT GOING : 10 Amp. SP MCB - 18 NOS	Nos.	1.00		
(b)	T P N 4 WAY DB :- (For Power) Having Incomer : 63 Amp. 4-P MCB OUT GOING : 16 Amp. SP MCB - 18 NOS	Nos.	1.00		
(c)	T P N 4 WAY DB :- (For A.C.) INCOMER: 100 Amp. 4 P, Heavy Duty MCB S & F 4 way SP MCB 32 Amp MCB - 12 NOS (Out going)	Nos.	1.00		
(d)	T P N 4 WAY DB :- (For UPS O/P) S & F 4 way TPN 63 Amp DP MCB - 1 NOS. 10 Amp. - 16 Amp. SP MCB - 12 NOS	Nos.	1.00		
(e)	S P N 12 WAY DB :- SP MCB 6 Amp = 10 Nos. DP MCB 63 Amp = 1 NOS.	Nos.	1.00		
(f)	S P N 4 WAY DB :- 4 pole 63 Amp. MCB - 1 Nos.	Nos.	1.00		
5.	LIGHT & FAN FIXTURES :-				
	P & F light fixture & accessories as per the following details and making connections, testing & installation with 3 years warranty. Including all removing, shifting, repairing, fixing, welding, cutting, instalation, testing, commissioning work of existing or proposed items for the following work. Including making good, proper finish of walls, floor and roof with masonry, R.C.C., plaster, pop, puty, primer, paint, etc. complete in all respects. Including color temp. for light fixtures must be 6500k. Dealer authorisation certificate with invoice detail required.				
a	Philips RC 380B LED Full glow 24" X 24" (6500K)/ EQ. MODEL OF SYSKA/ HAVELL'S/ WIPRO	Nos.	30.00		
b	Philips Green LEDi 15 Watt DN 194 B (6500K) / EQ. MODEL OF SYSKA/ HAVELL'S/ WIPRO	Nos.	50.00		
c	Philips LED Tube lights 18 W/ 22 W (6500K) / EQ. MODEL OF SYSKA/ HAVELL'S/ WIPRO	Nos.	15.00		
d	LED profile light SYSKA/ HAVELL'S/ WIPRO	Rft.	200.00		
e	LED rope light SYSKA/ HAVELL'S/ WIPRO	Rft.	400.00		
f	Wall fan (Metal body) 400 mm - Crompton / bajaj of capacitor start, three speed wall mounting/cabin fan of following sweep with the help of anchor bolts including making connection testing etc. as required. Each wall fan should be connected through independent switch and socket of 6Amp.	Nos.	10.00		
g	Exhaust fan 300 mm - Crompton/ Almonard / bajaj of Heavy duty capacitor start 1400 RPM single phase ISI marked Exhaust fan, IS:2312 marked including making opening if required, making connections testing etc. as required.	Nos.	2.00		
h	Ceiling fan Crompton make 48" in size (High speed)	Nos.	2.00		
6.	CABLES WIRES :-				
	P & L heavy duty armored cable on saddles wherever exposed and with aluminium lugs, cable termination with gland, aluminium lugs properly crimped, etc. complete. Including reusing of the existing cables wherever required as per direction of Bank Engineer/ Architect, vendor is bound to execute the items. All existing and proposed cables to be lay out in existing cable tray. Complete in all respects as per direction of Bank/ Architect.				
	XLPE Cable				
a	3.50 core X 75 sq. mm Al. armoured cable with 2 X 8 SWG G.I. wire in PVC conduit for earthing including cables termination with gland, Al. lugs properly crimped of required size.	Rmts.	15.00		
b	3.50 core X 50 sq. mm Al. armoured cable with 2 X 8 SWG G.I. wire in PVC conduit for earthing including cables termination with gland, Al. lugs properly crimped of required size.	Rmts.	15.00		
c	3.50 core X 25 sq. mm Al. armoured cable with 2 X 8 SWG G.I. wire in PVC conduit for earthing including cables termination with gland, Al. lugs properly crimped of required size.	Rmts.	30.00		

d	4.00 core X 16 sq. mm Al. armoured cable with 2 X 8 SWG G.I. wire in PVC conduit for earthing including cables termination with gland, Al. lugs properly crimped of required size.	Rmts.	30.00		
e	4.0 core X 10 sq. mm Cu cable 2X 8 sq.mm G.I. earth wire in PVC conduit for UPS O/P including cables termination with gland, Al. lugs properly crimped of required size. (UPS OUTPUT TO UPS DB) & (UPS INPUT TO UPS DB)	Rmts.	15.00		
7.	U.P.S. POINTS & CIRCUITS :-				
	P & F ups points in 2 mm thick PVC conduit with 2 X 4.0 sq. mm insulated copper wire along with 1 X 2.5 sq. mm PVC insulated wire for earthing including bends, nipples, junction, M.S. switch boxes each to have 3 nos. 6 A 5 pin modular socket 1 X 6 A indicator controlled by 1 X 6 A modular type switch compl fine finish incl. making necessary connection & start of equipment as per details & drawings.				
a	DIRECT POINT	Nos.	15.00		
b	LOOP POINT	Nos.	15.00		
8.	EARTHING :-				
(a)	Supply and installation of pipe-in-pipe technology ASHLOK Copper Earth Electrode earthing system modelt-39 with outer diameter of 80 mm length 2000 mm embedded in the soil with masonry inspection pit along with cover etc. complete in all respect. <u>The work should be got carried out through bank's authorized vender only. Each pit installation test certificate to be submitted after measurement of earth resistances as per the provision in IS 3043 (ups out DB earthing).</u> The inspection pit should be visible and at a proper place.	Nos.	1.00		
(b)	Supply and installation of pipe-in-pipe technology ASHLOK Copper Earth Electrode earthing system modelt-T19 with outer diameter of 50mm length 2000 mm embedded in the soil with masonry inspection pit along with cover etc. complete in all respect. <u>The work should be got carried out through bank's authorized vender only. Each pit installation test certificate to be submitted after measurement of earth resistances as per the provision in IS 3043 (Panel ups input DB earthing).</u>	Nos.	2.00		
(c)	P & L 2 X 8 SWg copper earth wire at designated place in PVC conduit (Pit to Panel/ Pit to UPS)	Mtrs.	20.00		
9.	MAIN PANEL :-				
	SITC of wall/ free standing floor mounted dust and vermin proof compartmentalised cubical MAIN PANEL CPRI approved made from 16 SWG CRCA steel sheet, required hardware, duly powder coating in grey or required shade after rinsing. The panel having PU/ Neoprene rubber gasket of not less than 3mm thickness, separate detachable gland plate M.S. base channel, hinged door with locking arrangement for equipment/ switchgear. Including cost of 1 Nos SPREADER LINK, 1 Nos EX. ROTARY HANDLE, 3 Nos INDICATION LIGHT RYB, MCCB, MCB's, METERS, 3 Nos 400/5A CT WITH SHORTING LINK C.T., ETC. Load bearing structure shall be of 2.0 mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable extension type structure. Panel with forced air cooling having exhaust fan of proper size. Including making good, proper finish of walls, floor and roof with masonry, R.C.C., plaster, pop, puty, primer, paint, etc. complete in all respects. Complete fine finish incl. making necessary connection & start of equipment as per Bank/ Architect. Complete in all respects as per Bank/ Architect.	Nos.	1.00		
	INCOMER: -				
	ALL MCCB SHOULD HAVE 25 KA SHORT CIRCUIT CURRENT CAPACITY (C- CLASS)				
(i)	250 Amp 4 - P, MCCB (3 Phase) 1 Nos. at incomer				
(ii)	200 Amp 4 - P, ON LOAD change over switch				

(iii)	300 Amp. Capacity aluminum bus bar, heat shrinkable proper insulation with heat shrinkable proper insulation with color coded. Analog ammeter and voltmeter with selector switches three number indicating lamp R-Y-B Phase indicators with 2 amp. back up HRC fuses & Energy Meter with KWH and PF indication (Back up Fuse protection)				
	OUT GOING :-				
	ALL MCCB SHOULD HAVE 25 KA SHORT CIRCUIT CURRENT CAPACITY				
	DOUBLE BUS BAR PANEL				
	DG SUPPLY ONLY FOR LIGHT, POWER, UPS, ATM ONLY				
	A.C. SHOULD NOT OPERATE ON DG SUPPLY				
	All MCCB must have 25 KA S.C. current capacity				
	All outgoing feeder should have separate door and compartment.				
	Each outgoing feeder shall be with indicator.				
(i)	100 Amp 4 - P, MCCB 25 KA (3 Phase) 4 Nos.				
(ii)	63 Amp 4 - P, MCCB 25 KA (3 Phase) 3 Nos.				
(iii)	40-63 Amp 4 - P, MCB (10 KA) 3 Nos.				
(iv)	16 Amp DP, MCB (1 on each Phase) 2 Nos.				
9	TELEPHONE SYSTEM				
a	S,F,T,I,C, Etc. of telephone tag box (krone) suitable for 25 pair housed in GI box with cover of suitable size including termination.	Nos.	1.00		
b	S, L, T, I, C Telephone point with 2 pair telephone cable from main supply to various counters, tables, walls, partitions, etc.with colour coading identification on both ends. Including 0.6 mm dia annealed with tinned screen protected CU conductor PCC sheathed 2 pair telephone cable in PVC conduit 2.00 mm thk. conduit as required. Including S & F modular type plate with telephone outlet box and RJ-11 sockets with housed in zinc passivated box/ PVC box with suitable connector strip in recessed wall/ partition as required. S & F modular type telephone outlet 1 pair coaded outlet. 6 pair telephone cable in PVC conduit as main line including all connection & all accessories etc. complete.	Nos.	15.00		
10	COMPUTER NETWORKING				
(a)	Computer networking points with 4 pair, 24 AWG UTP Cat 6 Cable as per latest ammendments of TIA /EIA 568 B.2-1 Specifications in PVC Conduits including making connections to Information outlets and Patch Panels with ferruling at both ends for identification with necessary tools for punching, stripping, crimping and testing required .	Nos.	15.00		
(b)	Supply , Installation and Testing of 4 pair , 100 Ohm, 24 AWG , E Cat 5 UTP, flexible , Double ended Patch Cords along with 2 No of RJ 45 connectors with strain relief boots as per TIA /EIA 568 B.2 Specifications including making connections to Inform outlets of lengths.				
	1.0 Meter as required.	Nos.	15.00		
	2.0 Meter as required.	Nos.	15.00		
(c)	Faceplate for Flush Mount Information Outlets Single Aperture with screw hole covers & Icon Tree Size 86mmX86mm including pvc/ ms box.	Nos.	15.00		
(d)	P,F,T,I,C, Etc. of Data/ server rack of appropriate size with 12U Rack with 24 port patch panel (2 nos.) and all required accessories complete in all respect.	Nos.	1.00		
6	AC DRAIN PIPE:-				
(a)	Condensate drain water piping 1" Dia PVC Duly Insulated to nearest drain trap to be laid concealed.				
	Rigid CPVC drain pipe of				
	6 Kg/Sq.cm with 6 mm thk. Nitrile rubber insulation				
	Insulated to nearest drain trap to be laid concealed.	R mt.	100.00		
7	AC REFRIGERANT PIPE including electrical cable :-				
a)	High wall split A.C.				
	of approved make duly insulated with elastometric nitrile rubber tubular insulation (9mm)				
	between each set of indoor & put				
	door unit for above mentioned units to interconnect				
	indoor unit and outdoor unit.				

	Copper piping as per manufacturer specifications with authorized certificate.				
	It should also be mentioned by vender in tender.				
	P & F electrical Copper (FRLS) wire of				
	3.0 core X 4.0 Sq.mm (Polycab, Finolex, KEI)	R mt.	100.00		
b)	Cassette type A.C.				
	of approved make duly insulated with elastometric nitrile rubber tubular insulation (9mm)				
	between each set of indoor & put				
	door unit for above mentioned units to interconnect indoor unit and outdoor unit.				
	Copper piping as per manufacturer specifications with authorized certificate.				
	It should also be mentioned by vender in tender.				
	P & F electrical Copper (FRLS) wire of				
	3.0 core X 4.0 Sq.mm (Polycab, Finolex, KEI)	R mt.	100.00		
	TOTAL (GST EXTRA)				