

**ELECTRICAL WORKS OF STATE BANK OF INDIA, SME BRANCH, PANIPAT (HR)****PRICE BID (ELECTRICAL INSTALLATION)**

S. No.	Item	Quantity	Units	Rate	Amount
1	<b>SUB HEAD 1 (COMPUTER POINTS AND DISTRIBUTION)</b>				
1.1	Supply all materials, receiving, storing, handling, fixing and laying 3 x 2.5 sq.mm PVC insulated copper conductor armoured cable and fixing of cable on wall with suitable size of clamps/saddles or laid in floor or recessed wall including cutting of floor/wall for computer points with suitable size GI Box with modular plate and cover in front including providing and fixing 3 no. 5 amp 5 pin modular sockets controlled by 1 no. 5 Amp switch with indicator (to be provided above the table top in partition) connection end terminations with suitable size of glands etc. complete as required. (Only two points can be connected in series with single cable ) (Make: Anchor/Crabtree/North West/ REO)	50.00	each		
	4 points for CM Cabin, 2 points per officer, Seat, per Counter, 1 for each Rack as per the inventory plan of the architect.				
2	As per item 1 above but with 1 no. 5 amp 5 pin modular sockets controlled by 1 no. 5 amp modular switch including the cover plate._(For T.V on Pillars/ Machines / As per branch Requirement)	2.00	each		
	<u>Circuit Wiring and Point Wiring</u>				
3	Circuit wiring from the MCB/MCCB from the Distribution Board to the Switch Board with 2 x 2.5 sq.mm + 1-1.5 sq.mm copper conductor (FR) in PVC Conduit concealed/open and making good the damaged surfaces as per direction of the Engineer-in-charge. including the cost of the PVC conduit 2mm thick. At least 9 points of Point Wiring shall required to be connected with single circuit.	12.00	Each		
4	Wiring for light point/ ceiling fan point/ exhaust fan point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit ISI Mark, with 6 Amp modular switch,modular plate, suitable GI junction & switch boxes & clip and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. (Wires Make: Havells/ RR				

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	Kable / KEI/Finolex) (Switches : Make: Anchor/Crabtree/North-West/MK)				
a)	Single 6 Amp Switch controlling 1 light point for T-5, exhaust Fans , Ceiling fan and other seprate room supply only	20.00	no.		
b)	Single 6 Amp Switch controlling Strip Lights / 4 no. downlights / 4 no. LED downlight / 2 no. 2'- 0"x 2'-0" 36 watt light fittings	50.00	no.		
c)	Single 6 Amp Socket controlling by 5 Amp Modular switch in switch boards etc complete as required	14.00	no.		
	Light Points to be calculated by number of lights and no extra cost shall be paid for dummy.				
5	<u>Extension of wall fans:</u>				
a)	Extension of points with 2 x 1.5 sq.mm. PVC insulated copper conductor cable in suitable dia MS conduit in recess conduit wiring system for wall fan points with modular switches of 6 amp {to be fixed at Normal Height} and 5 amp 5 pin modular sockets { to be fixed 1.5 foot below false ceiling} as per requirement and filling chassis etc complete as reqd.	20.00	no.		
6	Supply and Installation of Points for Wiring for power plug point (Raw Power Point) 16A with 2 x 2.5 sq.mm + 1 x 1.5sq.mm copper conductors , including the modular switches, sockets and plates Including the cost of 2mm thick PVC conduits. (Switches : Make: Anchor/Crabtree/North-West/ MK) (Wires Make: Havells/ RR Kable / KEI /Finolex {Two points to be provided per circuit.}) ( 2 points per circuit)	16.00	each		
	As per the drawing provided by the Architect.				
7	Providing & laying following sizes of PVC insulated copper conductor cable of 1100 V in flexible/PVC conduit with accessories such as glands. bends etc.(as per requirement) including making necessary Inter connection etc complete as reqd.				
a)	2 x 6 sq.mm with 1 no. suitable PVC insulated earth wire	15.00	mtr.		
8	Supply Installation, testing & commissioning of factory fabricated distribution board rust inhibited, powder coated Sheet sheet fabricated comprising of incoming & outgoing isolator & M.C.B's neutral link or neutral bus,top and bottom detachable entry earthing bolts Interconnection and grouting bolts etc complete as reqo. as per details below:-				

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a)	8 way MCBDB comprising of 1 no. 63 amp DPMCB "C"Series and 6 no. 6/10amp SPMCB's "C" SERIES. (for the UPS points each DB to be connected to 12 UPS points i.e only two points shall be connected with one MCB)	3.00	each		
b)	6 way MCBDB comprising of 1 no. 63 amp DPMCB "C"Series and 4 no. 6/10amp SPMCB's "C" SERIES. (for the UPS points each DB to be connected to 08 UPS points i.e only two points shall be connected with one MCB)	2.00	each		
c)	4 way TPNMCBDB Double Door (WATER PROOF TYPE IP66 RATED) in recessed wall including cutting of wall and making good the damages comprising 1 no 63AMP 4-pole TPNMCB and 3 Nos.40 Amp 4-Pole TPNMCB etc complete as required. (for AC OUTDOORS)	1.00	each		
d)	6 Way TPN MCBDB Double Door in recessed wall including cutting of wall and making good the damages comprising 1 no 63 A FP TPN and 2 Nos. 32 A DPMCBS & 14 no. 6A SPMCB etc complete as required. (for AC INDOORS ONLY).	1.00	each		
e)	4 way TPNCB comprising of 1 no. 63 Ampere TPN MCB "C" Series and 12 nos. 16 amp SPMCB "C" Series. (For Raw Power Point Circuits).	1.00	each		
f)	4 way TPNCB comprising of 1 no. 63 Ampere TPN MCB "C" Series with 30 mA ELCB and 12 nos. 6/10 amp SPMCB "C" Series. (For Light Point Circuits).	1.00	each		
g)	4 way DB comprising of 1 no. 100 amp 4 pole Isolator (for UPS I/C Branch & ATM)	1.00	each		
h)	4 way DB comprising of 2 no. 32 amp DPMCB "C " Series .(UPS O/P Branch)	2.00	each		
9	Supply, fixing and testing of following 3 pin metal clad industrial type plug & socket arrangement with plug top cap & chain controlled by 1 No. MCB (Make: Havells / HPL/ Standard/ Hager/ Legrand/ L&T)				
a)	20/25 amp with 20/25 amp SPMCB { UPS O/G 4 Branch }	4.00	no.		
b)	32 amp with 32 amp SPMCB { UPS I/C 3 Branch }	3.00	no.		
10	Providing, fixing, testing and commissioning of 15 Amp Power Point modular type socket with 25 amp DPMCB C SERIES along with Plug or the rooms so that the supply is connected only when the plug is inserted in the socket outside the rooms for fire safety. {1 each for Record Room and Safe Room}	2.00	no.		
11	Providing & fixing suitable size of MS box fabricated with 16 S.W.G. M.S. sheet either In recess wall or on surface to accommodate dedicated earth from earth electrode and	1.00	job		

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	further distribution of earth to computer points including providing 5mm backalite sheet on base connector strip and painting of box etc complete as reqd.				
	TOTAL SUB-HEAD -1				
	<b>SUB HEAD 2 (PANELS &amp; CABLES)</b>				
1	Providing & fixing 3 No. 200 amp kitkats (fuse carrier & base) with 1 no. neutral link on suitable size of backalite sheet of thickness not less than 6 mm etc. complete as reqd.	1.00	job		
2	MAIN PANEL				
	Supply at site installation, testing & commissioning of panel fabricated with 16 S.W.G.M.S. sheet. The panel shall be free standing type totally enclosed dust & vermin proof construction with rubber gaskets. The floor mounting panel shall have ISMC mounting channels, G.1. earth bus bar, bus bar chamber cable alleys interconnections with solid bar/PVC insulated copper conductor as per requirement, and suitable supports of bus bars. The panel shall be painted with 2 coats of enamel paint (grey shade) over the primer and shall also be provided with designation of incoming & outgoing feeder as per details below-				
	INCOMING				
a)	1 no MCCB Breaking Capacity 25 KA 200 Amp 4P , Model-DU250 Series, L&T make				
b)	1 no 0 -500V digital Voltmeter in separate compartment and digital Amp meter and one set of CTs ( 3 Nos ) with CT Ratio 350/5 A with LED type phase Indication Lamps with protection fuses in a separate compartment				
c)	1 set of 250 Amps capacity 4 strips Aluminium bus bars chamber				
	OUTGOING				
a)	1 no. MCCB Breaking Capacity 25 KA 160 Amp 3P, and 1 nos MCCB Breaking Capacity 10KA 100Amp 3P with seprate neutral Link, DU Series, L&T make.	1.00	set		
3	ESSENTIAL PANEL				
	Supply at site installation, testing & commissioning of panel fabricated with 16 S.W.G.M.S. sheet. The panel shall be free standing type totally enclosed dust & vermin proof construction with rubber gaskets. The floor mounting panel shall have ISMC mounting channels, G.1. earth bus bar, bus bar chamber cable alleys interconnections with solid bar/PVC insulated copper conductor as per requirement,				

	and suitable supports of bus bars. The panel shall be painted with 2 coats of enamel paint (grey shade) over the primer and shall also be provided with designation of incoming & outgoing feeder as per details below-				
	INCOMING				
a)	160 amp MCCB 4 pole with 35 KA breaking capacity at 415 Volts/ HIGHEST AVAILABLE.				
b)	1 set of 200 amp TPN aluminium busbar chamber				
c)	1 no. 0-500 V Voltmeter with selector switch in a separate compartment and amp meter with selector switch and one set of CTs (3 no.) with CT ratio 200/5 A with LED type indication lamps with protection fuses in a separate compartment				
	OUTGOING				
a)	3 No. 100 AMP 3 pole MCCB , 3 No. 63 AMP 3 pole MCCB (MCCB'S WITH 25KA BREAKING CAPACITY at 415 Volts.) ( For A, UPS, Light & Power Points)	1.00	set		
	In Panel for All MCCBs connected the interconnections must be with solid Bus Bar only.				
4	Supply, installation, testing & commissioning of PVC insulated PVC sheathed armored cable of 1100 V (IS-1554 part I) and fixing of cable on wall with suitable size of clamps/ saddles or laid in floor/recess wall including cutting of floor/wall and making good the damages etc. complete as reed. of following sizes:- (Make: Havells/ RR Kable / KEI/Finolex/Pymen)				
a)	4 x 25 sq. mm copper conductors with two Nos. 8 SWG GI wire	80.00	per mtr.		
b)	3.5 x 50 sq.mm aluminum conductor with two Nos. 8 SWG GI wire (from the mains to the Main Panel & from the genset to the Change over and from change over to the essential panel )	40.00	per mtr.		
c)	3.5 x 25 sq.mm. aluminium conductor with 2 no. 8 S.W.G G.1. wire (from Essential panel to the UPS I/C, RAW Power D.B )	70.00	per mtr.		
d)	3 x 6 sq.mm copper conductor (for UPS DB)	60.00	per mtr.		
e)	4 x 10 sq.mm. aluminium conductor with 1 no. 8 S.W.G. G.1. wire (from the Essential panel to the Lighting DB )	30.00	per mtr.		
f)	3 x 2.5 sq.mm. copper conductor.	40.00	per mtr.		

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5	End termination with Brass compression glands including providing lugs/ferruls and making necessary connections etc. complete as reqd. of following sizes:-				
a)	4 X 25 sq.mm copper conductor	6.00	each		
b)	3.5 X50 sq.mm aluminum conductor	6.00	each		
c)	3.5 X 25 sq.mm aluminum conductor	6.00	each		
d)	3 X6 sq. mm Copper conductor	10.00	each		
e)	4 X 10 sq. mm aluminium conductor	4.00	each		
f)	3 X2.5 sq. mm Copper conductor	20.00	each		
6	Providing & fixing suitable size of angle iron frame suitable for installation on wall/floor including grouting of frame & painting etc. complete as reqd. comprising of the following: (Make: Havells/HPL/Standard/ Legrand/L&T)				
a)	1 NO.4 pole 200 amp capacity changeover switch.	1.00	job		
7	Providing & fixing 16 S.W.G.M.S.sheet adaptor box, and also base frame for installation of M.C.B.D.B.s plug & socket arrangement and to cover cables in system room including painting etc. complete	1.00	sq.mtr.		
	TOTAL SUB -HEAD 2				
	<b>SUB-HEAD 3 (EARTHING)</b>				
1	Supply & fix copper plate earth station with 600x600x3 mm thick copper plate including all accessories such as watering pipe & funnel and providing masonry enclosure at top with cover plate i/c excavation of pit supplying & filling of salt charcoal, refilling of pit etc complete as reqd as per IS 3043-1987. The voltage between neutral & earth must be below 1 volt. ( For the Branch UPS )	1.00	set		
2	Supply & fix G.I. plate earth station with 600x600x6 mm thick G.I. plate including all accessories such as watering pipe & funnel and providing masonry enclosure at top with cover plate i/c excavation of pit, supplying & filling of charcoal, refilling of pit etc complete as reqd as per IS 3043-1987 (for the neutral earthing from the point of neutral link beside the fuse connection and second for the body earthing conncted to bothe panel body and the ups base panel) [ 1 FOR NUETRAL EARTHING and 1 FOR BODY EARTHING]	2.00	set		
	Chamber for the earthing shall be available at site without it the earthing cost shall not be paid for all the Earthings. You are also required to provide picture of earthing taken at the time of execution of the same.				

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3	Supplying and laying 20 mm X 3 mm copper strip at 0.50 meter below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required	5.00	per mtr.		
4	Supplying, fixing & termination of 20 mm X 3 mm GI strip with earth station below ground level and on wall saddle etc complete as reqd.	10.00	per mtr.		
5	Providing & fixing 8 S.W.G Copper earth wire on surface or in recess for loop earthing etc. as reqd.	50.00	per mtr.		
6	Providing & fixing 8 S.W.G G.I. earth wire on surface or in recess for loop earthing etc. as reqd.	70.00	per mtr.		
7	Supply & laying following dia 2 mm in thickness PVC pipe under floor or in recessed walls from earth electrode to UPS room for computer dedicated earthing, for data cabling, electrical cabling etc. including providing 1 no. G.I. pull wire for data cabling making good the damages etc. wherever reqd.				
a)	25mm	80.00	per mtr.		
	TOTAL SUB-HEAD - 3				
	<u>SUB HEAD 4 (NETWORKING)</u>				
1	Wiring for computer networking starting from mounting rack with UTP CAT-6 cable in 2 mm thick 25mm dia ISI mark PVC conduit with accessories such as bends, junction boxes including providing and fixing I/O plates and SMB complete with all networking accessories etc complete as reqd.(Make: D-Link/MOLEX/AMP/COMMSCOPE).	46.00	no.		
	3 points for BM Cabin, 2 points per seat, 6 points for ATM as per the drawing provided.				
2	Supply, installation, testing and commissioning of 24-port Patch Panel	2.00	no.		
3	Supply installation. testing and commissioning of mounted rack 12U height made of powder coated MS sheet.	2.00	no.		
4	Supply, fixing and commissioning of patch cable Cat-6 complete with 2 no. connectors etc. complete as reqd.				
a)	2m long	23.00	no.		
b)	1m long	46.00	no.		
5	Wiring for telephone points with 0.6 mm dia 2 pair insulated annealed tinned electrolytic copper conductor in 2 mm thick 25 mm dia ISI marked PVC conduit complete with accessories such as bends, junction boxes etc. with	20.00	no.		

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	suitable size of G.I. box modular plate and cover in front on surface or in recess including providing and fixing modular type telephone socket outlet and making necessary connections etc. complete as reqd. (Make: Dglink/KEI/Finolex)				
6	Supply, fixing and commissioning of 20 pair tag Block Box i.e FRP/PVC/Metal junction box with KRONE disconnection module necessary tag for identification for the telephone points. (box and strips Krone make)	1.00	no.		
7	Providing , Laying, testing & commissioning of 20 pair telephone cable from outside govt. / bsnl DB to Rack for lease line, ISDN of Make: Delton, finolex, polycab.	30.00	per mtr.		
	TOTAL SUB -HEAD 4				
	<u>SUB HEAD 5 (SUPPLY AND INSTALLATION OF FANS AND FIXTURES)</u>				
1	SITC of 2"x2" Ceiling grid 33-36 watt LED panel fixtures with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc Complete as reqd. Make Philips cat. RC 380 B- LED-30-6500PSE OD WH or equivalent of Wipro / Bajaj.	44.00	no.		
2	SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj.	26.00	no.		
	SITC of 9 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj.	12.00	no.		
3	SITC of 5 watt recess mounted LED spotlight with assembly complete with including making necessary for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. (Make : Philips/Wipro/ Bajaj)	8.00	no.		
4	SITC of 18 watt of 4 feet long T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc.	8.00	no.		

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	complete as reqd Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj.				
5	Supply of 450 mm sweep Metal Body Crompton greaves ( or equivalent) SDX BLCK GOLD / SSTROM 2 wall fan etc. 1325 rpm High Flow Model with 2 Pin Plug complete as required. (M/s equivalent of Bajaj / Havells/Usha )	15.00	no.		
6	LED Strip / profile light (4.5/5 watt) for cove (M/s Phillips /Wipro / Bajaj ) Complete in all respects with suitable drivers	30.00	per mtr.		
7	SITC of 1200 mm CEILING fans complete as reqd. (M/s Crompton High Breeze or equivalent of USHA / Bajaj).	2.00	no.		
8	SITC of 200 mm exhaust fans complete with self opening louvers / shutters including necessary frame etc, complete as reqd. (M/s Crompton High Breeze or equivalent of USHA / Bajaj)	4.00	no.		
9	SITC of Automatic Programmable Time Switch 24 Hour for ATM AC's (Make: L&T or equivalent to Legrand/Havells/Seimens)	1.00	no.		
	TOTAL SUB - HEAD 5				
	<b>SUMMARY:</b>				
	TOTAL SUB-HEAD-1				
	TOTAL SUB-HEAD-2				
	TOTAL SUB-HEAD-3				
	TOTAL SUB-HEAD-4				
	TOTAL SUB-HEAD-5				
	TOTAL AMOUNT (1 TO 5)				
Amount in Words:					

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