

**ESTIMATE OF ELECTRICAL WORKS AT PROPOSED STATE BANK OF INDIA ADMINISTRATIVE OFFICE,
LUDHIANA PUNJAB**

ESTIMATE FOR THE PENDING AND ADDITIONAL WORKS

S.NO.	ITEM /SPECIFICATION	QTY	UNITS	RATE	AMOUNT
PART-I : COMPUTER POINTS & DISTRIBUTION					
1	Supply all material, storing, handling, fixing of computer points in suitable size of GI box including providing 3 nos 5 amps 3 pin modular sockets to be provided under table top and controlled by 1 no 5 A moduler type switch, indicator (to be provided above the table top in partition) with moduler cover plate etc complete as required including 3X2.5 sq. mm copper armored cable.. Note: Maximum two computer points are to be provided on one circuit. (Switches : Make: Schnider/Crabtree/North-West/MK)	50.00	each		
	Note: The staff is requesting for additional points at various tables and hence the quantities are increased.				
1A	Supply all material, storing, handling, fixing of computer points in suitable size of GI box including providing 3 nos 5 amps 3 pin modular sockets to be provided under table top and controlled by 1 no 5 A moduler type switch, indicator (to be provided above the table top in partition) with moduler cover plate etc complete as required for the existing already provided 3X2.5 sq. mm copper armored cable.. Note: Maximum two computer points are to be provided on one circuit. (Switches : Make: Schnider/Crabtree/North-West/MK)	30.00	each		
2	Removing all material from existing location, storing, handling, re- fixing of computer points in suitable size of GI box including providing 3 nos 5 amps 3 pin modular sockets to be provided under table top and controlled by 1 no 5/15 A moduler type switch, indicator (to be provided above the table top in partition) with moduler cover plate etc complete utilizing the material removed and stored as required including utilizing the 3X2.5 sq. mm copper armored cable already available. Note: Maximum two computer points are to be provided on one circuit.	15.00	each		
3	Supply, installation, testing and commissioning of factory fabricated distribution board rust inhibited powder coated sheet fabricated comprising of incoming and outgoing isolator & MCBs neutral link or neutral bus, top and bottom detachable entry earthing bolts interconnection and grouting bolts etc complete as required as per details below. Make: Havells/HPL/Standard/ Hager/ Legrand/L&T				
a)	12 way SPN MCBDB Double Door comprising of 1 No 63 Amp DP Isolator and 10 No SPMCB 10/16 Amp. (UPS output)	1.00	no.		
b)	8 way SPN MCBDB comprising of 1 No 63 Amp DP Isolator and 6 No SPMCB 10/16 Amp. (UPS Output)	1.00	No		
c)	6 Way TPN MCBDB Double Door in recessed wall including cutting of wall and making good the damages comprising 1 no 125 A FP TPN and 10 Nos.32 A DPMCBS etc complete as required.	0.00	no.		
d)	4 Way TPN MCBDB Double Door in recessed wall including cutting of wall and making good the damages comprising 1 no 63 A FP TPN MCB and 12 Nos. 6/10 Amp SPMCBS etc complete as required. (for the raw power).	1.00	no.		
e)	4 way DB comprising of 1 no. 63/100 amp 4-pole TPN.	6.00	each		
RE-FIXING EXISTING DB'S					
4	Removing all material, re-installation, testing and commissioning of factory fabricated distribution board rust inhibited powder coated sheet fabricated comprising of incoming and outgoing isolator & MCBs neutral link or neutral bus, top and bottom detachable entry earthing bolts interconnection and grouting bolts etc complete as required as per details below. note: The work shall also include change of the damaged MCB's if any. Make: Havells/HPL/Standard/ Hager/ Legrand/L&T				
a)	12 way SPN MCBDB Double Door comprising of existing TPN/ISOLATOR/MCB's as per the direction of the engineer-in-charge.. (UPS output). Note: The work shall also include the change of any damaged MCB/DPMCMB/TPNMCP and complete removal and re-fixing of the wiring involved as per the direction of the Engineer-in-charge.	2.00	no.		
b)	8 way SPN MCBDB comprising of existing TPN/ISOLATOR/MCB's as per the direction of the engineer-in-charge.(UPS output)The work shall also include the change of any damaged MCB/DPMCMB/TPNMCP and complete removal & re-fixing of the wiring involved as per the direction of the Engineer-in-charge.	1.00	No		
c)	12 Way TPN MCBDB Double Door in recessed wall including cutting of wall and making good the damages comprising of existing arrangement of the TPNMCB/DPMCMB/MCB 's.The work shall also include the change of any damaged MCB/DPMCMB/TPNMCP and complete removal & re-fixing of the wiring involved as per the direction of the Engineer-in-charge.	1.00	no.		
d)	4 Way TPN MCBDB Double Door in recessed wall including cutting of wall and making good the damages, comprising of existing TPN/ISOLATOR/MCB's as per the direction of the engineer-in-charge.The work shall also include the change of any damaged MCB/DPMCMB/TPNMCP and complete removal & re-fixing of the wiring involved as per the direction of the Engineer-in-charge.	2.00	no.		
5	Supply, installation, testing and commissioning of following capacity 3 pin metal clad industrial type plug and socket arrangement with plug top, cap and chain controlled by under noted capacity:				
a)	20 Amp with 20 Amp. C Curve SP MCB. (for 1.5 TR / 1 TR AC's and UPS OUTPUT) Make: Havells/HPL/Standard/ Hager/Legrand/L&T	2.00	no.		
b)	30 Amps. with 32 Amp. SP MCB (UPS INPUT)	12.00	no.		
RE-FIXING EXISTING METAL CLAD SWITCHES					
6	Removing all material, re-installation, testing and commissioning of following capacity 3 pin metal clad industrial type plug and socket arrangement with plug top, cap and chain controlled by under noted capacity:				

a)	20/32 Amp with 20/32 Amp. C Curve SP/DP MCB. (for 1.5 TR / 1 TR AC's). The works shall include complete removal & re-fixing of the wiring involved as per the direction of the Engineer-in-charge.	12.00	no.		
7	Providing and fixing of suitable size MS box fabricated with 16 G MS sheet either in recess wall or on surface to accommodate dedicated earth from earth electrode and further distribution of earth to computer points including providing of 5 mm bakelite on base connector strip and painting of box etc as required.	1.00	job		
8	Wiring of light points, plug points & power points				
	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 6Amp 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.(Make: Havells / KEI/Finolex)				
	(Rate includes 3 x 2.5 sq.mm FRLS copper conductor, single core cable in PVC conduit for circuit/sub main wiring along with earth wire)				
a)	6 Amp Switch controlling 1 light point	20.00	no.		
b)	6 Amp Switch controlling 4 no. downlights or 2 no. 2'-0"x 2'-0" 36 watt light fitting	35.00	no.		
c)	Primary Wall fan point/Power Point controlled by 5 AMP socket controlled by 5amp switch	35.00	no.		
	Dependent 5 AMP socket controlled by 5amp switch in the	15.00	no.		
d)	Raw 15A Power Point controlled by 15 AMP socket controlled by 15 AMP switch (including the wiring with 3 x 2.5 sqmm FRLSPVC insulated copper conductor single core cable.	40.00	no.		
e)	Providing and fixing 6Amp switch for the existing wiring	30.00	no.		
f)	Providing and fixing 6Amp switch and socket for the existing wiring	8.00	no.		
g)	Providing and fixing 15Amp switch and socket for the existing wiring	30.00	no.		
	Note: Light points to be calculated by numbers of lights and no extra cost shall be paid for dummy switch.				
	TOTAL PART I				
PART-II : PANELS & CABLES					
9	TESTING/COMMISSIONING/CABLE CONNECTIONS of existing main panel and essential panel in the sub-station fabricated with 16 S.W.G.M.S. sheet. The panel is free standing type totally enclosed dust & vermin proof construction with rubber gaskets. The floor mounting panel have ISMC mounting channels, G.I. earth bus bar, bus bar chamber cable alleys interconnections with solid bar/PVC insulated copper conductor, and suitable supports of bus bars. The panel is painted with 2 coats of enamel paint (grey shade) over the primer and is provided with designation of incoming & outgoing feeder and providing/fixing additional 1 no MCCB breaking capacity 25 KA 125 amp 3P with suitable neutral link DN series. The work shall also include change of any damaged available MCCB and re-connections with suitable sundries the works shall also included complete wiring removal and re-wiring as per the direction of the engineer-in-charge.	2.00	set		
10	TESTING/COMMISSIONING/CABLE CONNECTIONS of the existing panel in the Administrative Office Floor fabricated with 16 S.W.G.M.S. sheet. The panel is free standing/wall mounting type totally enclosed dust & vermin proof construction with rubber gaskets. The floor/wall mounting panel have ISMC mounting channels, G.I. earth bus bar, bus bar chamber cable alleys interconnections with solid bar/PVC insulated copper conductor, and suitable supports of bus bars. The panel is painted with 2 coats of enamel paint (grey shade) over the primer and is provided with designation of incoming & outgoing feeder. The work shall also include change of any damaged available MCCB and re-connections with suitable sundries as per the the works shall also included complete wiring removal and re-wiring direction of the engineer-in-charge.	1.00	set		
11	Supply, Installation, testing & commissioning of PVC insulated PVC sheathed armoured cable of 1100 V (IS :1554 Part 1) and fixing of cable on wall with suitable size of clamps /saddles or laid in floor/recess wall including cutting of wall /floor and making good the damages etc complete as required of following sizes (ISI marked). (Make: Havells/ RR Kable / KEI/Finolex/Pymen)				
a)	3.5X25 sq. mm aluminum conductors with two Nos. 8 SWG GI wire	120.00	mtr.		
b)	4.0 x 16 sq. mm aluminum conductors with two Nos. 8 SWG GI wire	20.00	mtr.		
c)	3X6 sq. mm copper armored cable .	110.00	mtr.		
d)	3X2.5 sq. mm copper armored cable.	180.00	mtr.		
12	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium/Copper conductor cable of 1.1 kV grade as required.				
a)	3.5X 25 sq.mm aluminum conductor	4.00	no.		
b)	4X 16 sq.mm aluminum conductor	4.00	no.		
c)	3X6 sq. mm Copper cable gland.	6.00	no.		
d)	3X2.5 sq. mm Copper cable gland.	28.00	no.		

13	UPS DISTRIBUTION BOARD				
	RE-FIXING OF THE UPS DISTRIBUTION PANEL				
	Removal of all material, re- installation, testing and commissioning existing UPS supply panel to the suitable location as per the direction of the Engineer-in-charge, mounted over duly painted 16 SWG Sheet and factory fabricated distribution board rust inhibited, powder coated sheet fabricated comprising of incoming and outgoing isolator and MCB's neutral link or neutral bus, top and bottom detachable entry earthing bolts interconnection and grouting bolts etc complete as reqd. Make: Havells/HPL/Standard/ Hager/ Legrand/L&T as per the existing arrangement already available. The work shall also include replacement of any damaged switch/MCB etc. The work shall be complete ensuring the required working for the UPS supply as required. The work shall be complete including removing of the existing wiring and re-wiring complete as per the direction of the Engineer-in-charge.	1.00	work		
14	Providing and laying following sizes of PVC insulated copper conductor cable of 1100 V in flexible/ PVC conduit pipe with accessories such as glands bends etc(as per requirement) including making necessary interconnection etc complete as required.				
	2 X 6 Sq mm with 1 no suitable insulated 2.5 sq mm copper wire in PVC flexible pipe. (Make: Havells / KEI/Finolex)	25.00	mtr.		
15	Supply and fixing the 1 no.4 pole 200 Amps capacity change over switch with adaptor box on suitable size of MS base and angle iron frame of suitable size and strength for installation on wall /floor including grouting of frame & painting etc. complete as required . Make: Havells/HPL/Standard/ Hager/ Legrand/L&T	1.00	no.		
16	EARTHING				
	a)Supply and fix copper plate earth station with 600X600X3mm copper plate including all accessories such as watering pipe and funnel and providing masonry enclosure at top with cover plate i.e excavation of pit, supplying and filling of salt charcoal, refilling of pit etc complete as required as per IS 3043-1987. The voltage between neutral and earth must be below 1 V.	1.00	Sets		
	b)Supply and fix GI plate earth station with 600X600X6mm GI plate including all accessories such as watering pipe and funnel and providing masonry enclosure at top with cover plate i.e excavation of pit, supplying and filling of salt charcoal, refilling of pit etc complete as required as per IS 3043-1987.	2.00	Sets		
17	a)Supply fixing and termination of 20X3 mm copper strip with earth station below ground level etc as required.	3.00	Meter		
	b)Supply fixing and termination of 32 X 6 mm G.I strip with earth station below ground level etc as required.	6.00	Meter		
18	a)Providing and fixing of 8 SWG copper earth wire in the recess for loop earthing etc. as required.	30.00	Meter		
	b)Providing and fixing of 8 SWG GI earth wire in the recess for loop earthing etc. as required.	45.00	Meter		
19	Supply and 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 25 mm diameter	75.00	Meter		
	TOTAL PART II				
	PART III- TELPHONE & DATA CABLE				
20	Wiring for telephone points with 0.5 mm dia 2 pair insulated annealed tinned electroplatic copper conductor in 2 mm thick 25 mm dia ISI marked PVC conduit complete with accessories such as bends, junction boxes etc. with 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)	45.00	no.		
21	Supply, installation and testing & commissioning of Tag Block 20 pair for telephone connections Make krone	4.00	no.		
22	The testing/installation/commissioning of the existing EPABX system including the works of removing wiring/re-wiring and making the EPABX working completely functional.	1.00	work		
23	Providing , Laying, testing & commisioning of 10 pair telephone cable from outside govt. / bsnl DB to Rack for lease line, ISDN of Make: Delton, finolex, polycab.	50.00	mtr.		
24	Data cabling work for computer networking starting from mounting rack at system room with UTP CAT-6e LAN Data cable in 2mm thick 25 mm dia ISI mark PVC conduit with accessories such as bends, Tees, junction boxes including providing and fixing cat-6 I/O plates and SMB complete with all networking accessories etc complete as reqd.,and ferruling with cat-6 LAN Cable etc complete as reqd. Note: flexible pipe not to be used any where. (Make: Dglink/KEI/Finolex)	80.00	no.		
	Note: as per the instructions from the IT department and the conecreded officials, there is requirement of atleast two netwroking points per seat instead of one.				
	testing and ferruling (D-Link/MOLEX/AMP/COMMSCOPE) . Note: maximum 6 no. data cable must be run in one pvc pipe.				
24A	Providing and fixing cat-6 I/O plates and SMB complete with all networking accessories etc complete as reqd. for the existing networking cable, and ferruling with existing cat-6 LAN Cable etc complete as reqd. Note: flexible pipe not to be used any where. (Make: Dglink/KEI/Finolex)	35.00	no.		

25	Removal, re-installation, testing and commissioning of 24-port Patch Panel of Make D-Link/MOLEX/AMP/COMMSCOPE) note: the work shall also include the removal of the same from the current location with utmost care.	3.00	no.		
26	Removal, Re-installation, testing and commissioning of mounted rack 15" height made of powder coated MS sheet Make D- Link/MOLEX/AMP/COMMSCOPE). note: the work shall also include the removal of the same from the current location with utmost care.	3.00	no.		
27	supply, installation, testing and commissioning of factory manufactured CAT-6e patch cord complete with 2 no. connectors etc. complete as reqd. (Make: Dglink/KEI/Finolex)				
	1 mtr. long	80.00	no.		
	2 mtr. long	60.00	no.		
27	Removal, Re-installation, Testing and commissioning of the existing sound amplifier and announcement system. The work shall include rectification of any defect and complete removal of the wiring and re-wiring to the recommended position as per the direction of the Engineer-in-charge.	1.00	work		
28	supply, installation, testing and commissioning of factorymanufactured ceiling mounted 8" dia speakers/woofers (JBL,Ahuja,Sony,Philips) with range of minimum 100 watts, complete as reqd. The work shall also include the complete flexible wiring works as per the manufacturer's specifications from the amplifier to the required locations including all the sundries for making them functional.	8.00	nos.		
TOTAL PART III					
PART-IV : SUPPLY, INSTALLATION TESTING & COMMISSIONING OF FANS & FIXTURES					
29	SITC of 2'x2' Celing grid 30-36 watt LED 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 / Crompton.	78.00	no.		
30	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 / Crompton.	35.00	no.		
31	SITC of 5 watt recess mounted LED down light with assembly complete with including making necessary connections etc. Complete as reqd. (M/s Crompton Cat No. Or equivalent of Philips/Wipro)	20.00	no.		
32	ITC of 18 watt of T5 LED fixtures 4 ft. directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc. complete as reqd. The work shall also include removal of the existing T-5 lights already existing.	16.00	no.		
33	SITC of 450 mm sweep Metal Body wall fan etc, complete as reqd. (M/s Crompton Sstrom or equivalent of Crompton/Usha/Havells.)	40.00	no.		
34	LED Strip light (4.5/5 watt)for cove (M/s Phillips /Wipro / Bajaj Complete in all respects with suitable drivers	170.00	MTR.		
35	SITC of 1200 mm CEILING fans complete as reqd. (M/s Crompton High Breeze or equivalent of USHA / Bajaj).	1.00	no.		
36	SITC of 350 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). Only metal frame/body are to be installed.	6.00	no.		
37	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). PVC body are to be installed.	4.00	no.		
TOTAL PART IV					
PART-V AIR CONDITIONING WORK					
AIR CONDITIONING WORKS					
38	Supplying & Laying of following COPPER REFRIGERANT PIPING Thickness 22 SWG For Hiwall Split AC complete with fittings Suction / Discharge line insulated with 12 mm SUPERLON / ARMAFLEX suction line. Multi-runs between Indoor & Outdoor units shall be considered as ONE length for the purpose of measurement. (Make: Total Line/Armacell)				
	1/4" + 1/2" Refrigerant piping - For Hiwall Split AC's	50.00	mtr.		
	HWS/Cassette A.C. (2.0 Tr) Copper pipe size (5/8" & 3/8")	175.00	mtr.		
39	Supplying & laying recessed in wall Rigid ISI Mark PVC drain pipe of size 20mm dia complete with fittings, U traps etc. & as specified to the nearest toilet / drain point under floor or in recessed walls for AC drains including cutting of walls, bends & Tees. making good the damages etc. wherever required. (Make: Diplast/Supreme)	80.00	mtr		
40	Electrical flexible cable of 3x2.5sq.mm multi strand suitable for 1.5 Tr H.W Split & 2.00 Tr Cassette Multi-runs between Indoor & Outdoor units shall be considered as ONE length for the purpose of measurement.(Make: Havells / KEI/Finolex)	200.00	mtr		
41	Removal and refixing of the existing High Wall Split AC Units and stablizer to the required location. The work shall also include servicing of the same before installation. The vendor shall take utmost care to while removal and re-installation to avoid any damages or leakage of gas from the units.	4.00	no.		
42	Removal of the existing window AC Units and stablizer to the required location. The work shall also include servicing of the same before installation. The vendor shall take utmost care to while removal and re-installation to avoid any damages or leakage of gas from the units.	4.00	no.		

	TOTAL PART IV				
	TOTAL OF PART I +II+III+V (A)				
	TOTAL OF PART - IV (B)				
	TOTAL AMOUNT (A+B)				
	Note: GST as applicable shall be extra.				
Note: the vendor have to provide LAN diagram, cable layout, earthing diagram after completion of the work along with the bill, without it payment will not be made.					