

ELECTRICAL WORK OF STATE BANK OF INDIA BRANCH AT CHAIL (HP.)

S.No.	Item	Quantity	Units	Rate	Amount
1	SUB HEAD 1 (COMPUTER POINTS AND DISTRIBUTION)				
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. 5/6 amp 5 pin modular sockets controlled by 1 no. 10Amp switch with indicator, connection end terminations with suitable size of Brass compression glands etc. complete as required. (Only two points can be connected in series with single cable)	15.00	Each		
	4 points for BM Cabin , 2 points for Networking Equipment's in Banking Hall and 2 per SWC				
2	As per item 1 above but with 2 no. 16 amp 5 pin modular sockets controlled by 1 no. 16 amp modular switch and 6 amp indicator Lamp including the cover plate.	5.00	Each		
	1-BM, 2- Rack,1- BANKING HALL				
3	Point Wiring:				
	Wiring for light point / ceiling Fan point / exhaust fan point with 1.5sq.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 etc. as required. (WiresMake: HAVELLS/ RR KABLES / KEI / FINOLEX) (SWITCHES : MAKE ANCHOR / CRABTREE / NORTH-WEST / MK)				
	(Rate includes 3 x 2.5 sq.mm FRLS copper conductor , sinle core cable in PVC conduit for circuit/sub main wiring along with earth wire)				
(a)	Single 6 Amp Swirch controlling 1 light point for T-5, Wall Fan , Exhaust Fan, Ceiling Fan and other separate room supply only	17.00	no.		
(b)	single 6Amp Switch controlling 4 no downlights / 4 no LED downlights / 2no 2'-0" x 2'-0" 36 watt light fittings.	30.00	no.		
(c)	single 6Amp socket controlling by 5Amp Modular switch in switch boards etc complete as required.	7.00	no.		
	2 - 36watt LED /or 4 - 15 watt LED / 1 exhaust fan /1 ceiling fan to be provided per point				
(d)	Supply and Installation of Points for Wiring for power plug point (heating 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. To be provided for water cooler , pantry , Banking Hall ,BM Cabin and rest for SWC. {One point to be provided per circuit.}	10.00	Each		
4	Extension of wall fans:				
	Extension of existing points with 2x1.5 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 and 5 amp 5 pin modular sockets as per requirement and filling chassis etc complete as reqd.	7.00	no.		
5	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.				
	2 x 6 sq.mm with 1 no. suitable PVC insulated earth wire	20.00	mtr.		

S.No.	Item	Quantity	Units	Rate	Amount
6	Supply Installation, testing & commissioning of factory fabricated distribution board rust inhibited, powder coated Sheet sheet fabricated comprising of incoming & outgoing isolator & MCB's neutral link or neutral bus, top and bottom detachable entry earthing bolts Interconnection and grouting bolts etc complete as require as per details below:-				
a)	12 way MCBDB Double Door comprising of 1 no. 63 amp DPMCB "C"Series and 10 no. 6/10amp SPMCB's "C" SERIES. (for the UPS points each DB to be connected to 20 UPS points i.e only two points shall be connected with one MCB)/ L&T / OR EQUAVILANT	1.00	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 8 UPS points i.e only two points shall be connected with one MCB)/ L&T / OR EQUAVILANT	1.00	each		
c)	4 WayTP MCBDB Double Door in recessed wall including cutting of wall and making good the damages comprising 1 no 4P 63AMP, 130mA and 12 Nos. 6/10 Amp SPMCBS etc complete as required. (for Light, Fan point, Raw power points).	1.00	Each		
d)	4 WayTP MCBDB Double Door in recessed wall including cutting of wall and making good the damages comprising 1 no 4P 63AMP, 130mA ELCB and 12 Nos. 20/25 Amp SPMCBS etc complete as required. (for Raw Power Only)	1.00	Each		
e)	4 way SPDB comprising of 1 no. 63 amp 4 pole MCB (for UPS I/C) L&T / OR EQUAVILANT	1.00	Each		
f)	4 way SPDB comprising of 2 no. 63 amp DPMCB (for UPS) "C " Series]L&T / OR EQUAVILANT	2.00	Each		
g)	4 way TPDB comprising of 1 no. 63 Ampere TPNMCB C series and 6 nos. 32Amp DPMCB C Series.(AC DB & e-LOBBY) L&T / OR EQUAVILANT	2.00	each		
7	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				
a)	20/25 amp SPMCB (one for making the plug socket arrangement for the record room so that the supply is connected only when the plug is inserted in the socket outside the record room for fire safety) L&T OR EQUAVILANT	8.00	no.		
b)	30 amp with 63 amp DPMCB	3.00	no.		
8	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 further distribution of earth to computer points including providing 5mm backalite sheet on base connector strip and painting of box etc complete as reqd.	1.00	job		
	TOTAL SUB-HEAD -1				
	SUB HEAD 2 (PANELS & CABLES)				
1	Providing & fixing 3 No.100 amp kit-kats (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		
	MAIN PANEL				
2a)	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)	125 amp MCCB 4 pole with 36 KA breaking capacity at 415 Volts/ HIGHEST AVAILABLE./ DN SERIES or Equavilant				

S.No.	Item	Quantity	Units	Rate	Amount
	1 set of 160 amp TPN aluminium bus-bar chamber				
	1 no. 0-500 V Voltmeter with selector switch in a separate compartment and amp meter with selector switch and one set of CT's (3 no.) with CT ratio 100/5 A with LED type indication lamps with protection fuses in a separate compartment				
	OUTGOING				
a)	5 No. 63 amp 3 pole MCCB. (MCCB'S WITH 25KA BREAKING CAPACITY at 415 Volts. / HIGHEST AVAILABLE). (For A.C , UPS , Lighting & Heating) & e- LOBBY/ L&T DN SERIES or Equavilant	1.00	set		
3	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 reqd. of following sizes:-				
a)	4 x 16 sq.mm. aluminium conductor with 2 no. 8S.WG.G.1. wire (from the Meter to the Main panel)(from the Genset to the Change over and from change over to the essential panel, from the main panel to the essential panel.)	40.00	per mtr.		
b)	3 x 2.5 sq.mm. copper conductor (for the Air-conditioning wiring) ARMOURED CABLE	50.00	per mtr.		
c)	3.5 x 25 sq.mm. aluminium conductor with 2 no. 8S.WG.G.1. wire FROM KIT-KAT TO c/o SWITCH AND MAIN PANEL	35.00	per mtr.		
e)	3 x 6 sq.mm copper conductor (for UPS DB)	60.00	per mtr.		
4	End termination with Brass compression glands including providing lugs/ferruls and making necessary connections etc. complete as reqd. of following sizes:-				
a)	3.5 x 50sq.mm. aluminium conductor	0.00	each		
b)	3 x 2.5 sq.mm. copper conductor	10.00	each		
c)	3.5 x 25 sq.mm. aluminium conductor with 2 no. 8S.WG.G.1. wire	5.00	each		
d)	4 x 16sq.mm. aluminium conductor	12.00	each		
e)	3 x 6 sq.mm copper conductor	4.00	each		
5	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:				
a)	1 NO.4 pole 160 amp capacity changeover switch of L&T make or Equavilant	1.00	job		
6	Providing & fixing 16 S.W.G. M.S. Sheet adapter 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	sqmt.		
	TOTAL SUB -HEAD 2				
	SUB-HEAD 3 (EARTHING)				
1.1	Supply & fix copper plate earth station with 600x600x3mm thick copper plate including Signage Board , 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.	1.00	set		
1.2	Supply & fix G.I. plate earth station with 600x600x6mm thick G.I. plate including Signage Board , 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 connected to both panel body and the ups base panel)	2.00	set		
	NOTE: chamber for the earthing shall be available at site without it the earthing cost shall not be paid for all the Earthing You are also required to provide picture of earthing taken at the time of execution of the same.				

S.No.	Item	Quantity	Units	Rate	Amount
2	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	3.00	mtr.		
	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.	6.00	mtr.		
3.1	Providing & fixing 8 S.W.G G.I. Cu earth wire on surface or in recess for loop earthing etc. as reqd.	35.00	mtr.		
3.2	Providing & fixing 8 S.W.G G.I. earth wire on surface or in recess for loop earthing etc. as reqd.	40.00	mtr.		
4	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	60.00	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.	18.00	no.		
2	Installation, testing and commissioning of 24-port unmanaged switch 10/100 full duplex complete as reqd. (to be supplied by the bank)	1.00	no.		
3	Supply, installation, testing and commissioning of 24-port Patch Panel	1.00	no.		
4	Supply installation. testing and commissioning of mounted rack 15" height made of powder coated MS sheet.	1.00	no.		
5	Supply, fixing and commissioning of patch cable Cat-6 complete with 2 no. connectors etc. complete as reqd.				
a)	1m long	18.00	no.		
b)	2m long	7.00	no.		
	Supply, fixing and commissioning of cable Cat-6 complete with 2 no. connectors or as required etc. complete as reqd including upvc 19mm dia. pipe conduit of heavy duty.				
c)	50mm	30.00	mtr.		
6	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 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.	6.00	no.		
7	Supply, fixing and commissioning of 20 pair tag block for telephone points. (box and strips Krone make)	1.00	no.		
TOTAL SUB -HEAD 4					
<u>SUB-HEAD 5 (AIR CONDITIONING PIPING WORK)</u>					
1	Supplying & Laying of following COPPER REFRIGERANT PIPING Thickness 22 SWG For Hi-wall 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.				
	1/4" + 1/2" Refrigerant piping - For Hi wall Split AC's	50.00	per mtr.		
2	Supply and laying following dia 3.38mm (confirming to ASTM D1785 standard) in thickness, heavy duty PVC pipe under floor or recessed in walls for AC drains, { To nearest To including bends, Tees etc as required complete in all respect	30.00	per mtr.		
3	Electrical flexible cable of 3 x 2.5sq.mm FRLS Cu cable multi strand suitable for 2 Tr H.W Split & 1.5 Tr H.W Split. Multi-runs between Indoor & Outdoor units shall be considered as ONE length for the purpose of measurement.	95.00	per mtr.		
TOTAL SUB-HEAD 5					

S.No.	Item	Quantity	Units	Rate	Amount
	<u>SUB HEAD 6 (INSTALLATION OF FANS AND FIXTURES.</u>				
1	Installation of 36 watt. LED fitting crompton greaves (or equivalent) LCTLR-36-FD-CDL complete as required. (including the cost of earthing connection)	14.00	no.		
2	Installation of 15 watt. LED fitting crompton greaves (or equivalent) LCDD-15-CDL complete as required	35.00	no.		
3	Installation, testing and commissioning of wall fans including making necessary arrangement for fixing on wall complete as reqd.	5.00	no.		
4	Installation, testing and commissioning of T5 fixtures directly on ceiling / wall including making necessary connections with suitable size of PVC insulated copper conductor wire etc. complete as reqd.	4.00	no.		
6	Installation, testing and commissioning of exhaust fans including making connection with adjacent point etc. complete as reqd.	4.00	no.		
	TOTAL SUB-HEAD 6				
	<u>SUB HEAD 7 (SUPPLY OF FANS & FIXTURES)</u>				
1	Supply of 36 watt. LED fitting crompton greaves (or equivalent) LCTLRN-36-FO-CDL complete as required	14.00	no.		
2	Supply of 15 watt. LED fitting crompton greaves (or equivalent) LSDRMN-15 W-CDL complete as required	35.00	no.		
3	SITC of 450 mm sweep metal body and metal blades crompton greaves or equivalent SDX BLACK GOLD wall fan etc.1325 sqm high flow complete as reqd. (M/s Crompton or equivalent of USHA/ Bajaj/ ORIENT TORNADO WALL II) Use double string WALL FAN, One String used for Speed Control & other String used for Rotation	5.00	no.		
4	4.5/5 Watt LED strip light for cove with Driver (M/s. Philips Wipro / Bajaj) Complete in all respects required shade warm white/ blue as per requirement.	26.00	MTR.		
5	Supply of following Batten type LED fittings complete as reqd.				
a)	LED fitting 18 watt LCTL-18-CDL OF CROMPTON OR EQUIVALENT OF PHILIPS/WIPRO	4.00	no.		
7	Supply of 250 mm (sweep) exhaust fans complete with self opening louvers/shutters etc. complete as reqd. (M/s Crompton cross air or equivalent of USHA / Bajaj)	4.00	no.		
	TOTAL SUB - HEAD 7				
	TOTAL SUB-HEAD-1				
	TOTAL SUB-HEAD-2				
	TOTAL SUB-HEAD-3				
	TOTAL SUB-HEAD-4				
	TOTAL SUB-HEAD-5				
	TOTAL SUB-HEAD-6				
	TOTAL SUB-HEAD-7				
	TOTAL COST OF ELECTRICAL WORKS (1 TO 7)				
	DISCOUNT IF ANY				
	NET COST OF ELECTRICAL WORKS				
	Add GST @ 18% on Total as applicable				

IN WORDS (RS)

SIGNATURE OF CONTRACTOR

NAME OF CONTRACTOR

ADDRESS OF CONTRACTOR

IMPORTANT NOTE: ALL WIRES USED AT SITE SHALL BE FRLS ONLY (FLAME RETARDANT LOW SMOKE WIRES ONLY)