

**PRICE-BID**

**ELECTRICAL WORKS AT STATE BANK OF INDIA, KANDROORI KANGRA (HP)**

S.No.	Specifications	Qty.	Units	Rate	Amount
<b>PART-I :</b>	<b>COMPUTER POINTS &amp; DISTRIBUTION</b>				
<b>1</b>	Supply all material, storing, handling, fixing of computer points computer points in suitable size of GI/PVC box including providing 3 nos 5 amps 3 pin modular sockets to be provided under table top and controlled by 1 no 15 A moduler type switch and indicator ( <b>to be provided above the table top in partition</b> ) 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: Anchor Roma/Crabtree/North-West/Legrand-ARTEOR)	15	each		
<b>2</b>	As per item no. 1 above but with 2 no. 16amp 5pin modular sockets controlled by 1 no. 16 amp modular switch and 6 amp indicator Lamp including the cover plate (ATM-2, BM-1, Rack-1)	5	each		
<b>3</b>	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/ Legrand/L&T				
<b>a)</b>	8 way SPN MCBDB Double Door comprising of 1 No 63 Amp DP Isolator and 6 No SPMCB 10/16 Amp. ( UPS output)	1	no.		
<b>b)</b>	6 way SPN MCBDB comprising of 1 No 63 Amp DP Isolator and 4 No SPMCB 10/16 Amp. (UPS)	1	No		
<b>c)</b>	4 Way TP MCBDB Double Door in recessed wall including cutting of wall and making good the damages comprising 1 no 100 A FP TPN and 6 Nos.32 A DPMCBS etc complete as required. ( <b>for Air conditioning only</b> ).	1	no.		
<b>d)</b>	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. 6/20/25 Amp SPMCBS etc complete as required. (for Raw Power, light points)	1	no.		
<b>4</b>	<b>RAW POWER:</b> Supply all material, storing, handling, fixing of computer points computer points in suitable size of GI/PVC box including providing 1 nos 15 amps 6 pin modular power sockets to be provided controlled by 1 no 15 A moduler type switch and indicator with moduler cover plate etc complete as required including 3X2.5 sq. mm copper armored cable. Note: One power points are to be provided on one circuit and directly to be connected on Power DB. (Switches : Make: Anchor/Crabtree/North-West/MK	13	each		

SIGNATURES OF CONTRACTOR WITH SEAL

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: (Make: Havells/HPL/Standard/Legrand/L&T)				
a)	25 Amp with 25 Amp. C Curve SP MCB. (1.5 TR High wall split AC's-7, UPS-4, Safe Room-1)	12	no.		
6	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	job		
7	<b>Basic electrical Wiring of light points, plug points &amp; power points</b>				
	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.(Wires Make: Havells/ RR Kable / KEI/Finolex) (Switches : Make: Anchor/Crabtree/North-West/MK)				
	(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)	single 6 Amp Switch controlling 1 light point for T-5, Wall Fans, exhaust Fans , Ceiling fan and other seprate room supply only	31	no.		
b)	single 6 Amp Switch controlling 4 no. downlights / 4 no. LED downlight / 2 no. 2'- 0"x 2'-0" 36 watt light fittings	18	no.		
c)	single 6Amp socket controlling by 5Amp Modular switch in switch boards etc complete as required	10	no.		
d)	Extension of points with 2x1.5 sq.m.. PVC insulated coppe conductor cable in suitable MS conduit in recess couduit wiring system for wall fan points with modular switches of 6AMP(to be fixed at normal height) and 5Amp 5pin modular sockets ( to be fixed 1'-6" below false ceiling) as per requirement & filling the chases etc, complete as required.	13	no.		
	<b>Note: Lihgts/fans points to be calculated by numbers of lights and no extra cost shall be paid for dummy switch.)</b>				
<b>PART-II</b>	<b>PANELS , KIT KATS &amp; CABLES</b>				
8	Providing and fixing of 03 no 250 Amps FUSE BASE WITH FUSE HOLDER & 3no. 200 Amps DIN TYPE FUSE LINKS (Type HN), 1 no neutral link on suitable size of Bakelite sheet of thickness not less than 12 mm complete as required.	1	job		
	Fuse Base & Holder - Type HB250 (CAT No. 90406) of L&T.				

	DIN Type Fuse Link: (CAT No. SF94132)of L&T				
<b>9</b>	<b>MAIN PANEL:</b> Supply at site installation testing and commissioning of panel fabricated with 16 G MS sheet. The panel shall be free standing type totally enclosed dust and vermin proof construction with rubber gaskets. The floor mounting panel shall have ISMC mounting channels, GI earth busbar, busbar chamber ,cable alleys interconnection with solid bar/PVC insulated copper conductor as per requirement, and suitable supports of busbars. The panel shall be painted with two coats of enamel paint ( Grey shade) over primer and shall also be provided with designation of Incoming and outgoing feeder as details below:				
	<b>INCOMING</b>				
	1 no MCCB Breaking Capacity 25 KA 200 Amp 4P , Model-DU250 Series, L&T make				
	1 no 0 -500V digital Voltmeter in separate compartment and digital Amp meter and one set of CTs ( 3 Nos ) with CT Ratio 200/5 A with LED type phase Indication Lamps with protection fuses in a separate compartment				
	200 Amps capacity 4 strips Aluminium bus bars.				
	<b>OUTGOING</b>				
	2 nos MCCB Breaking Capacity 10 KA 100 Amp 3P (1 NO. TO POWER DB, 1 NO. TO ACDB)with seprate neutral Link, DU Series, L&T make & 2No. MCCB Breaking Capacity 10 KA 63 Amp 3P (upsdb)	1	set		
<b>10</b>	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). <b>(Make: Havells/ RR Kable / KEI/Finolex/Pymen)</b>				
<b>a)</b>	3.5X50 sq. mm aluminum conductors armoured cable with two Nos. 8 SWG GI wire	45	mtr.		
<b>c)</b>	3.5X25 sq. mm aluminum conductors armoured cable with two Nos. 8 SWG GI wire	55	mtr.		
<b>d)</b>	3X6 sq. mm <b>copper conductors armored cable</b> with one Nos. 8 SWG GI wire	25	mtr.		
<b>e)</b>	3X2.5 sq. mm <b>copper conductors armored cable</b>	58	mtr.		
<b>11</b>	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.				
<b>a)</b>	3.5X50 sq.mm aluminum conductor	7	no.		
<b>b)</b>	3.5X 25 sq.mm aluminum conductor	8	no.		
<b>c)</b>	3X6 sq. mm Copper cable gland.	2	no.		
<b>d)</b>	3X 2.5 sq.mm aluminum conductor	5	no.		
<b>12</b>	Supplying & fixing the 1 no.4 pole 200 Amps capacity change over switch and complete connection with Electrical Panels as required .Make: Havells/HPL/Standard/ Legrand/L&T	1	no.		

<b>13</b>	<b>UPS DISTRIBUTION BOARD</b>				
	supply, installation, testing and commissioning of 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. <b>Make: Havells/HPL/Standard/Legrand/L&amp;T</b> as per details below :-				
<b>a</b>	4 way DB comprising of 2 no. 63 amp DPMCB (UPS out put)	2	each		
<b>b</b>	4 way TPNDB Double Door comprising of 1 no. incoming 63 amp MCB & 3 no. 32 DPMCB (UPS input)	1	each		
<b>14</b>	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 multi stranded copper wire in PVC flexible pipe. ( <b>Make: Havells/ RR Kable / KEI/Finolex</b> )	20	mtr.		
<b>15</b>	<b>EARTHING</b>				
	a)Supply and fix copper plate earth station with 600X600X3mm copper plate with 5M length 20x3mm size copper strip below Ground Level, including Earth signage board , 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	Sets		
	b)Supply and fix GI plate earth station with 600X600X6mm GI plate with 5M length 20x3mm size GI strip below Ground Level including Earth signage board , 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	Sets		
<b>16</b>	a)Providing and fixing of 8 SWG copper earth wire in the recess for loop earthing etc. as required.	8	Meter		
	b)Providing and fixing of 8 SWG GI earth wire in the recess for loop earthing etc. as required.	20	Meter		
<b>17</b>	Supply and laying following dia 2 mm in thickness ISI Mark PVC pipe under floor or in recessed walls from earth electrode to UPS room for computer dedicated earthing				
	25 mm diameter	50	Meter		
<b>PART III</b>	<b>TELEPHONE &amp; DATA CABLE</b>				
<b>18</b>	Wiring for telephone points with 0.6 mm dia 2 pair	7	no.		

	insulated annealed tinned electrolatic 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./PVC 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. <b>(Make: Dglink/KEI/Finolex)</b>				
19	Supply, installation and testing & commissioning of Tag Block 20 pair for telephone connections Make: krone	1	no.		
20	Providing , Laying, testing & commisioning of 10 pair telephone cable from outside govt. / bsnl DB to Rack for lease line, ISDN of <b>Make: Delton, finolex, polycab.</b>	20	mtr.		
21	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. (Make: D-LinK/MOLEX/AMP/COMMSCOPE). <b>Note: TWO Data Points to be provided in One Table/Counter. Extra poits not to be paid if provided.</b> Maximum 6 no. data cable must be run in one pvc pipe. Tagging/marking at both ends of data points (Seat & Switch) to be done.	12	no.		
22	supply, installation, testing and commissioning of 24-port Patch Panel	1	no.		
23	Supply and installation, testing and commissioning of mounted rack 15" hight made of powder coated MS sheet	1	no.		
24	supply, installation, testing and commissioning of factory manufactured CAT-6e patch chord complete with 2 no. connectors etc. complete as reqd.				
a)	1 mtr. long	12	no.		
b)	2 mtr. long	7	no.		
<b><u>PART-IV : AIR CONDITIONING REFRIGERATION/DRAIN WORKS</u></b>					
25	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. <b>(Make: Total Line/Armacell)</b>				
a)	1/4" + 1/2" Refrigerant piping - For Hiwall Split AC's	80	mtr.		
b)	HWS/Cassette AC ( 2.0 Tr & 3.0 Tr) Copper pipe size ( 5/8" & 3/8")	0	mtr.		
26	Supplying & laying recessed in wall Rigid ISI Mark PVC drain pipe of size 20mm dia complete with	50	mtr		

	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. <b>(Make: Diplast/Supreme)</b>				
<b>27</b>	Supplying and providing FRLS Eletrical flexible cable of multi strand suitable for 1.5 Tr H.W Split & 2.00 Tr Cassette Multi-runs between Indoor & Outdoor units and between Metal Clads to Out door for electrical supply etc complete as required <b>(Make: Havells/ RR Kable / KEI/Finolex)</b>				
<b>a)</b>	3x2.5sq.mm	120	mtr		
<b>b)</b>	4x2.5sq.mm	0	mtr		
<b>28</b>	Charges for keeping the office/Branch operational with temporary connections of UPS, Data Cabling, Telephone, Raw Power, Supply to lights, Fans etc. as per requiremets of office during the renovation period. The job also includes removal of old wiring & fixtures, shifting, testing, commissioning of existing UPS from from current location to new location as per Plan.	1	job		
<b><u>PART-V : SUPPLY, INSTALLATION TESTING &amp; COMMISSIONING OF FANS &amp; FIXTURES</u></b>					
<b>29</b>	SITC of 2"x2" Celing 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 : Cat No: LDTLBK-36W-CDL of Crompton or equivalent of Wipro /Philips	28	no.		
<b>120 Lumens per Watt, Color temperature 6000K</b>					
<b>30</b>	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	10	no.		
<b>31</b>	SITC of 5 watt recess mounted <b>LED spotlight</b> with assembly complete with including making necessary connections etc. Complete as reqd. ( M/s Crompton Cat No. Or equivalent of Philips/Wipro/ Bajaj)	4	no.		
<b>32</b>	SITC of 18/20 watt of T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc. complete as reqd Make Phillips /Wipro / Crompton	11	no.		
<b>33</b>	SITC of 450 mm sweep wall fan with metal body & metal fins, complete as required. (Make: Crompton/ Khaitan / Bajaj.)	13	no.		
<b>34</b>	LED Strip light (4.5/5 watt )for cove (M/s Phillips /Wipro / Bajaj Complete in all respects with suitable drivers	30	MTR.		

<b>35</b>	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	no.		
<b>36</b>	SITC of Automatic Programmable Time Switch 24 Hour for Glow Signboard along with necessary wiring using 3x2.5sq.mm. wire & MCB(Make: L&T or equivalent to Legrand/Havells/Seimens)	1	no.		
<b>37</b>	SITC of 1200 mm CEILING fans complete as required. (M/s Crompton High Breeze or equivalent of USHA/BAJAJ)	2	no.		
<b>38</b>	SITC of 30Watt street light/flood light for lighting the front side of the Branch (M/s Crompton or equivalent of PHILIPS/WIPRO)	2	no.		
	<b>TOTAL OF PART : I +II+III+IV (A)</b>				
	<b>TOTAL OF PART : V (B)</b>				
	<b>TOTAL AMOUNT (A+B)</b>				
<b>AMOUNT IN WORDS:</b>					
Note: the vendor have to provide LAN diagram after completion of the work along with the bill, without it payment will not be made. Tagging / Marking on data points at both ends i.e. Seats & Switch to done					

SIGNATURES OF CONTRACTOR WITH SEAL