

BILL OF QUANTITIES FOR ELECTRICAL WORKS AT STATE BANK OF INDIA, SHAHKOT BRANCH Distt. JALANDHAR. (PB.)					
UPS & RAW POWER POINTS					
1	Supply all materials receiving, storing, handling, fixing & laying of 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 recess 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 3 pin modular socket controlled by 1 No. 5 amp modular switch with indicator , connection end terminations with suitable size of glands etc. complete as reqd.(On UPS Power)	26	Each		
2	As per item 1 above but with 1 no. 15 amp 5 pin modular socket controlled by 1 no. 15 amp modular switch with indicator.(On Raw power only for printer)	3	each		
3	As per item 1 above but with 2 Nos. 15 A 5 pin socket controlled by 1 no 15 A switch and indicator.(U.P.S and Data Points are to be provided in lock and key arrangement)	3	each		
DISTRIBUTION BOXES					
4	supply, installation, testing and commissioning of factory fabricated distribution board rust inhibited, powder coated sheet fabricated comprising of incoming isolator and outgoing MCB's neutral link or neutral bus, top and bottom detachable entry earthing bolts interconnection and grouting bolts etc complete as reqd. as per details below :-				
a	8- way MCBDB double door in recessed wall including cutting of wall and making good the damages comprising of 1no. 63 Amp isolator and 6 no. 6/10 Amp MCBs etc. complete as reqd.(For banking hall)	1	no.		
b	12- way MCBDB double door in recessed wall including cutting of wall and making good the damages comprising of 1no. 63 Amp isolator and 10 no. 6/10 Amp MCBs etc. complete as reqd. (For banking hall)	1	no.		
c	4 Way TP MCBDB Double Door in recessed wall including cutting of wall and making good the damages comprising 1 no 63 A FP TPN and 6 Nos. 32 A DPMCBs etc complete as required.	2	no.		
d	4 way TPN MCBDB Double Door comprising of 1 no. 100 amp isolator and 12 no. 6-32 amp SP MCBs etc. complete as reqd. (For lighting & Power circuits)	2	no.		
CONTROL AND DISTRIBUTION PANELS					
5	Providing and fixing 3 no. 200Amp kitkats (fuse carrier & base) with 1 no. neutral link on suitable size of Bakelite sheet of thickness not less than 6mm etc. complete as reqd.	1	no.		
PANELS & CABLES					

6	Supply at site installation testing and commissioning of wall mounted cubicle type electrical panel comprising MCCBs, bus bar, cable alleys etc fabricated with 16 G MS sheet and baked or Powder Coated Paint complete with rubber gaskets name plate interconnection etc. The panel shall consist of:	1	Set		
	<u>INCOMING</u>				
	a) 1 no MCCB Breaking Capacity 36 KA 250Amp 4P DN Series L&T with seprate Neutral Link				
	b) Digital Voltmeter in separate compartment and Digital Amp meter and one set of CTs (3 Nos) with CT Ratio 250/5 A with LED type Indication Lamps with protection MCB in a separate compartment				
	c) 300 Amps capacity 4 strips Aluminium bus bars.				
	<u>OUTGOING</u>				
	a) 2 no MCCB Breaking Capacity 25 KA 63 Amp 3P. DN Series with seprate Neutral Link				
	b) 1 no MCCB Breaking Capacity 25 KA 160Amp 4P DN Series L&T with seprate Neutral Link				
7	Supply at site installation testing and commissioning of panel fabricated with 16 G MS sheet. The panel shall be free standing				
	<u>INCOMING</u>				
	1 no MCCB Breaking Capacity 25 KA 160 Amp 4P , DN Series				
	1 no 0 -500V digital Voltmeter in separate compartment and digital Amp meter and one set of CTs (3 Nos) with CT Ratio 150/5 A with LED type phase Indication Lamps with protection fuses in a				
	200 Amps capacity 4 strips Aluminium bus bars.				
	<u>OUTGOING</u>				
	6 nos MCCB Breaking Capacity 25 KA 63 Amp 3P with seprate neutral Link, DN Series, L&T make.	1.00	set		
8	Supply, installation, testing & commissioning of PVC insulated PVC sheathed armored 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 floor/wall and making good the damages etc. complete as reqd. of following sizes:-				
(a)	3.5x50 sq.mm. Aluminium conductor with 2 no. 8 S.W.G. GI wire (Distribution From Main Switch)	45	per mtr.		
(b)	3.5x25 sq.mm. Aluminium conductor with 2 no. 8 S.W.G. GI wire (From panel to UPS panel and AC DB)	75	per mtr.		
(c)	4x16 sq.mm. Aluminium conductor with 2 no. 8 S.W.G. GI wire (for light DB)	20	per mtr.		
(d)	3x6 sq.mm. Copper conductor (UPS DB's)	75	per mtr.		
(e)	3x2.5 sq.mm. copper conductor (for AC distribution)	160	per mtr.		
9	End termination with brass compression glands including providing lugs/ferrules and making necessary connection etc. complete as reqd. following sizes:				
(a)	3.5x50 sq.mm. Aluminium conductor	6	each		
(b)	3.5x25 sq.mm. Aluminium conductor	12	each		
(c)	4x10/3x6 sq.mm. Aluminium/copper conductor	6	each		

(d)	3x2.5 sq.mm. copper conductor	24	each		
10	Providing and fixing 200A, 4P ON LOAD Change Over Switch with suitable size of angle iron frame suitable for installation on wall/floor including grouting of frame & painting etc. complete as required	1	job		
UPS DISTRIBUTION BOARD					
11	Providing and fixing 16 S.W.G. MS sheet adapter box, and also base frame for installation of MCB DBs plug and socket arrangement and to cover cables in system room including painting etc. complete	1	sq. mtr.		
12	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. as per details below :-				
a	4 way DB comprising of 1 no. 63 amp 4 pole TPN MCB (for AC & UPS input)	1	each		
b	4 way DB comprising of 2 no. 63 amp DPMCB (UPS out put)	2	each		
13	supply fixing, 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 with 20/25 amp SPMCB(For Acs and UPS)	14	no.		
	(b) 30 amp with 32 amp DPMCB	3	no.		
	(b) 30 amp with 63 amp DPMCB	2	no.		
14	Providing and laying following sizes of PVC insulated copper conductor cable of 1100V in flexible/PVC conduit with accessories such as glands, bends etc. (as per requirement) including making necessary inter connection etc complete as reqd. 2X6 sq.mm with 1 suitable PVC insulated earth wire	45	per mtr.		
15	Providing and fixing suitable size of MS box fabricated with 16 S.W.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 5mm Bakelite sheet on base connector strip and painting of box etc complete as reqd	1	job		
EARTHING					
16	(a) supply and fix copper plate earth station with 600x600x3 mm thick copper plate including all accessories such as watering pipe and funnel and providing masonry enclosure at top with cover plate i/c excavation of pit, supplying and 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	set		
	(b) supply and fix G.I. plate earth station with 600x600x6 mm thick G.I. plate including all accessories such as watering pipe and funnel and providing masonry enclosure at top with cover plate i/c excavation of pit, supplying and filling of salt charcoal, refilling of pit etc complete as reqd as per IS-3043-1987.	2	set		
17	(a) supplying, fixing & termination of 20x3 mm copper strip with earth station below ground level etc complete as reqd.	5	mtr		

	(b) supplying, fixing & termination of 32x6 mm G.I. strip with earth station below ground level and on wall saddle etc complete	10	mtr		
18	(a) providing and fixing 8 S.W.G. copper earth wire on surface or in recess for loop earthing etc. as reqd.	40	mtr		
	(b) providing and fixing 8 S.W.G. G.I. earth wire on surface or in recess for loop earthing etc. as reqd.	30	mtr		
19	Supply & laying 2mm thick 25 mm dia ISI mark PVC conduit pipe complete with accessories such as bends, junction boxes etc under floor or in recessed walls from copper earth electrode to UPS room for computer dedicated earthing, from GI earth electrode to main panel & UPS panel etc. wherever reqd. Note: flexible pipe not to be used any where.	65	mtr		
COMMUNICATION					
20	Networking for computer networking starting from mounting rack with UTP CAT-6 cable in 2mm thick 25 mm 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. Note: flexible pipe not to be used any where.	24	no.		
21	Shifting & Re-Installation of Existing, testing and commissioning of 24-port Patch Panel	1	no.		
22	Shifting & Re-Installation of Existing, testing and commissioning of mounted rack 15" height made of powder coated MS sheet	1	no.		
23	supply, installation, testing and commissioning of factory made patch cable CAT-6 complete with 2 no. connectors etc. complete as reqd.				
	(a) 1 mtr. long	24	no.		
	(b) 2 mtr. long	24	no.		
24	wiring for telephone points with 0.6 mm dia 2 pair insulated annealed tinned electrolytic copper conductor in 2mm thick 25mm 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. Note: flexible pipe not to be used any where.	10	no.		
25	Supply & fixing of 10 pair FRP/PVC/Metal junction box with KRONE disconnection module necessary tag for identification	1	no.		
26	Supply, installation, testing and commissioning of 10 pair telephone unarmoured cable as required. (Make-finolex/delton/polycab)	25	mtr.		
27	Automatic Programmable Time Switch 24 Hour for Glow sign board (Make: L&T or equivalent to Legrand/Havells/Seimens)	1	no.		
28	Supply Installation, testing & commissioning of LED STRIP light with driver and Accessories complete as required (MS CROMPTON or equivalent of WIPRO , PHILLIPS, BAJAJ etc.				
a)	Warm white Cat No. 38389 (M/S Philips)	20	mtr		
b)	Blue Colour Cat No.LST 20 BL(M/s Crompton)	5	mtr		

29	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular socket, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.				
(a)	Primary point (light / fan controlled by one switch)	20	no.		
(b)	Two light point controlled by one switch	32	no.		
(c)	One plug point	10	no.		
(d)	one switch controlled by one socket (independent for wall fan)	14	no.		
30	Wiring circuit/submain wiring along with earth wire with the following size of PVC single core FRLS copper conductor wire in 2mm thickness PVC pipe as required: 2x2.5 sq mm + 1x1.5 sq mm earth wire	150	mtr		
31	SITC of 30 watt Street light /Flood light for lighting the front side of the branch(M/s Crompton Cat No. LSTS-30-CDL or equivalent of Philips/Wipro .	4	no.		
AC WORKS					
32	Supply, installation, testing and commissioning of refrigeration pipe including cutting of wall and fixing with suitable saddles or clamps, providing suitable size of sleeves for passing refrigerant pipe from indoor to outdoor unit including making necessary arrangement etc. complete as required. The work includes chesling and plastering of walls & Cement concrete on floors wherefrom pipe is laid.				
a	For High Wall A.C. (1.0 & 1.5 Tr) Copper pipe size (1/2" & 1/4")	140	mtr		
b	HWS/Cassette A.C. (2.0 Tr & 3.0Tr) Copper pipe size (5/8" & 3/8")	45	mtr		
33	Supply & fixing of 25 mm dia hard pipe for drain complete with all accessories such as tee, bend cutting chases making good the damages and leak proof joints to avoid seepage in wall/floor etc. complete as required. The work includes chesling and plastering of walls & Cement concrete on floors wherefrom pipe is laid.	60	mtr		
34	Supply and laying of 3 core 2.5 sq mm FRLS copper flexible cable (for HWS AC) Make: Finolex / Polycab / Havells / Pyemen / Ecko	150	mtr		
35	Supply and laying of 4 core 2.5 sq mm FRLS copper flexible cable (for HWS AC) Make: Finolex / Polycab / Havells / Pyemen / Ecko	120	mtr		
TOTAL PART _A					
PART- III_B					
SUPPLY OF FIXTURES					
1	SITC of 36 watt recess mounted LED Light panel suitable for 2' x 2' modular/gypsum ceiling with assembly complete with including making necessary frames & connections etc. Complete as reqd. (M/s Crompton Cat No. LCTLRN-36-FO-CDL or equivalent of Philips/Wipro/ Bajaj)	16	no.		
2	SITC of 15 watt recess mounted LED down lighter with assembly complete with including making necessary connections etc. Complete as reqd. (M/s Crompton Cat No. LCDE-15-CDL or equivalent of Philips/Wipro/ Bajaj)	66	no.		

