

**ESTIMATE FOR REMAINING ELECTRICAL INSTALLATION WORKS OF STATE BANK OF INDIA, ADMIN OFFICE , URBAN ESTATE PHASE-II, BATHINDA**

SN.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE	AMOUNT
	<b>PART- A</b>				
	<b>UPS &amp; RAW POWER POINTS</b>				
1a	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 <b>modular</b> socket controlled by 1 No. 5 amp <b>modular</b> switch with indicator , connection end terminations with suitable size of glands etc. complete as reqd.(On UPS Power) <b>(Make of switch/ socket L&amp;T/LEGRAND/ HAVELLS)(Make of cable- polycab/KEI/Finolex)</b>	44	Each		
1b	As per item 1 above but with 1 no. 15 amp 5 pin modular socket controlled by 1 no. 15 amp <b>modular</b> switch with indicator.(On Raw power only for printer ) <b>(Make of switch/ socket L&amp;T/LEGRAND/ HAVELLS)(Make of cable- polycab/KEI/Finolex)</b>	31	each		
1c	Supply and fixing of computer points with suitable size GI box with modular plate and cover in front including providing and fixing 3 No. 5 amp 3 pin <b>modular</b> socket controlled by 1 No. 5 amp <b>modular</b> switch with indicator , connection end terminations with suitable size of glands etc. complete as reqd. and connection with existing 3x2.5sqmm copper armoured cable (On UPS Power) <b>(Make of switch/ socket L&amp;T/LEGRAND/ HAVELLS)</b>	210	each		
1d	Supply and fixing of computer points with suitable size GI box with modular plate and cover in front including providing and fixing 1 no. 15 amp 5 pin modular socket controlled by 1 no. 15 amp <b>modular</b> switch with indicator . (using existing 3x2.5sqmm wire/3x2.5sqmm copper armoured cables)(On Raw power only for printer) <b>(Make of switch/ socket L&amp;T/LEGRAND/ HAVELLS)</b>	115	each		
1e	Supply and fixing of computer points with suitable size GI box with modular plate and cover in front including providing and fixing 2 no. 15 amp 5 pin modular socket & 1 no. 5amp 5pin modular socket controlled by 1 no. 15 amp <b>modular</b> switch with indicator . (using existing 3x2.5sqmm wire/3x2.5sqmm copper armoured cables)(On Raw power only for printer) <b>(Make of switch/ socket L&amp;T/LEGRAND/ HAVELLS)</b>	10	Each		
	<b>DISTRIBUTION BOXES</b>				
2	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 :- <b>(Make L&amp;T/LEGRAND/ HAVELLS/ABB /GE)</b>				

2.1	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.( <b>For UPS Supply to computers)</b>	1	no.		
2.2	8 way MCBDB double door in recessed wall including cutting of wall and making good the damages comprising of 1no. 40 Amp isolator and 6 no. 6/10 Amp MCBs etc. complete as reqd.( <b>For UPS Supply to computers)</b>	4	no.		
2.3	6 way MCBDB double door in recessed wall including cutting of wall and making good the damages comprising of 1no. 40 Amp isolator and 4 no. 6/10 Amp MCBs etc. complete as reqd.( <b>For UPS Supply to computers)</b>	4	no.		
2.4	Termination of existing circuit wiring, powerpoint wiring in existing light and power DBs with 25mm PVC conduit complete as required.	12	job		
<b>3.0</b>	<b>MV DISTRIBUTION BOARDS (Panels)</b>				
3.1	<b>Testing, comissioning of existing LT panel including connectons of existing floor cables of 3.5x70sqmm, 3.5x95sqmm, 3.5x25sqmm, 4x16sqmm etc. and main supply cable of 3.5x300/400/185 sqmm from synchronising panel to LT Panel including double compression gland for 1.1 kV grade, XLPE insulated, Al/ Cu Conductor cable, the details are as under:</b>				
	<b>MAIN FLOOR DISTRIBUTION PANEL</b>				
	<b>Incoming</b>				
	1 No. 400 amps 50 kA 440 volt TPN MCCB (Make DN Series L&T, Havells Series , Schneider, or Equivalent Make) with thermal magnetic protective releases , short circuit and E/F releases with heavy duty solid detachable neutral link complete with on indication lamp ( <b>Makes M.D.S /standard/ havells / HPL/L&amp;T</b> )				
	<b>Metering, Indication &amp; Protection:</b>				
a	1no. 0-500V Digital multimeter in a separate compartment & Digital Ammeter and one set of CTs (3no.) with CT ratio400/5 A with LED type indication lamps with protection fuses in separate compartment (Make L&T, Havells, ABB etc.)				
b	Breaker ON OFF indication Lamps (Make L&T C&S, Standred )				
c	R-Y-B indication lamps with MCBs (Makes L&T C&S,Standred )				
	<b>Bus Bar:</b>				
	400 A, TPN Al. Bus Bar of suitable length having Current density 1Amp/sq.mm & having high conductivity electrical grade suitable to withstand symmetrical fault level of 16 kA. Neutral busbar shall be of 100% capacity.				
	<b>Outgoings:</b>				
-	11 Nos. 200A 3P MCCB 25kA (For Supply to Floor Panel) ( <b>Make DN Series L&amp;T, Havells Series , Schneider, or Equivalent Make</b> )				
-	13 Nos. 63A 3P MCCB 25kA (For Supply to Floor Panel) ( <b>Make DN Series L&amp;T, Havells Series , Schneider, or Equivalent Make</b> )				
	<b>MAIN FLOOR DISTRIBUTION PANEL as described above</b>	1	JOB		

4.0	testing and comissioning of existing UPS Outgoing Panel with end termination of floor existing cables and termination of existing UPS DB cable with 3x6sqmm copper armoured cable with existing UPS panel 3.5x25sqmm aluminium armoured cable at common point i.e. in floor shaft on all 05 floors using suitable connector/DB/63amp Bus Bar including double compression gland for 1.1 kV grade, XLPE insulated, Al/ Cu Conductor cable	1	JOB		
I	The detail of existing UPS panel is as follows:				
A	<b>MAIN INCOMER WITH METERING</b>				
	1No 320A TP+N MCCB 36KA with Thermal Magnetic release having S/C, O/L Protection.				
	1 No Spreader links				
	1 No Door Operating Handle				
	1 NO Digital VAF meter Class 1 ( <b>Makes Automatic Electric / Rishab/ Essena</b> )				
	3 NO CT320/5A Class 1.0, 10VA				
	Per Phase Indication Light LED RED 220V AC				
	3 NO Control MCB 6A SP 10KA				
	1 NO Neutral Link 6A				
B	<b>Bus Bar:</b>				
	320 A, TPN Al. Bus Bar of suitable length having Current density 1Amp/sq.mm & having high conductivity electrical grade suitable to withstand symmetrical fault level of 16kA. Neutral busbar shall be of 100% capacity.				
C	<b>OUTGOING FEEDERS</b>				
	7 No 63A TP MCCB 25KA ( <b>Make DN Series L&amp;T, Havells Series ,Schneider, or Equivalent Make</b> )				
	Spreader links				
	UPS Panel as described above complete with specifications and enclosed SLD				
5.0	<b>Retrofitting Work of MCCB"s in Existing Panel (Synchronisation panel)</b>				
	<b>Outgoing</b>				
A	1No 320A TP MCCB 25KA with Thermal Magnetic release having S/C, O/L Protection.( <b>Make DN Series L&amp;T, Havells Series , Schneider, or Equivalent Make</b> )				
	<b>Metering, Indication &amp; Protection:</b>				
5.1	In Existing Panel as described above complete with specifications	1	nos		
5.2	1 no. 63 Amp 3P MCCB, 25 KA with thermal magnetic protective releases.( <b>Make DN Series L&amp;T, Havells Series , Schneider, or Equivalent Make</b> )	1	Nos		
6.0	<b>Installation, testing and comissioning existing lift panel including termination of all relevent input and output cables with double compression gland for 1.1 kV grade, XLPE insulated, Al/ Cu Conductor cable, complete as required. Existing lift panel is at roof and need to be shift at stilt (in panel room). The detail of existing lift panel is as follows:</b>	1	Job		
	<b>Incoming:</b>				
	1 Nos. 160 Amps 4P 25kA Moulded Case Circuit Breaker (Icu = Ics) with Thermal Magnetic based release for short circuit and over current				

	<b>Indications :</b>				
a	1 Sets supply available indicating lamps with control MCBs.				
b	R-Y-B and ON/OFF indication lamps for incomer (Makes L&T C&S Standard )				
c	Earth Fault Module				
	<b>Bus Bars:</b>				
	160 A, TPN Al. Bus Bar of suitable length having Current density 1Amp/sq.mm & having high conductivity electrical grade suitable to withstand symmetrical fault level of 10 kA. Neutral busbar shall be of 100% capacity.				
	<b>Outgoing</b>				
-	4 Nos. 40A FP RCBO ( 300 mA)				
-	4 Nos. 25A DP MCB( Motor Duty)				
7	supply fixing, testing of following 3 pin metal clad industrial type plug & socket arrangement with plug top cap & chain controlled by 1 No. MCB in record room, locker room in basement -1 and basement-2 <b>(Make- M.D.S /standard/ indo Asian/ havells / HPL)</b>				
a	20 amp with 10 amp SPMCB ( For Record Room Supply )	6	no.		
8.1	Supply and laying of 3x2.5sqmm copper flexible cable in 25mm PVC conduit for submersible pump. Cable is to be laid from nearest Light/power DB upto motor through starter	150	mtr		
8.2	Supply and laying of 3x4sqmm copper flexible cable in 25mm PVC conduit for UPS DB	40	mtr		
9a	<b>REPAIR TO EXTERNAL ELECTRICAL FITTING/EXISTING ELECTRICAL,PANNELS ETC</b>				
	Erection, testing & commissioning of following sizes of cable end terminations with double compression gland for 1.1 kV grade, XLPE insulated, Al/ Cu Conductor cable (Makes- HNI / BBI / Commet)				
	cables connected to different existing floor panels DB's, Fire Alarm Panel, Water Pump, from Metering Panel to VCB Panel, VCB to Transformer, Transformer to LD Panel, DG Set 2 No. to ATS Panel, LT Panel to APFC Panel, LD Panel to AC Panel and also as per site.	1	Job		
9b	with reference to S.N.9a Various Test Report/clearance certificate of installations such as all panels (HT/LT/floor panels), cables (HT/LT), ATS switches/MCCB/ACB/VCB, floor DBs, all earthing, details of electrical equipments like pumps, transformers, APFC etc, as required by PSPCL authority from HT Contractors/ electrical inspector.	1	Job		
10	<b>REPAIR TO APFC PANEL</b>				
	Repair, Testing, commissioning and make in operation of existing APFC Panel with replacement of old capacitors and APFC ( if Required )The Existing panel is factory made and floor mounted, Auto manual for power factor correction of 300 KVA capacity having 3 phase MD (XL) type power capacitors, required number of steps given below provided with the digital display and setting. The Detail of Existing APFC panel 300 KVR as follow:				
	300 KVR Capacitor in 12 steps (50+50+50+50+50+25+10+10+5) (300 KVR)	1	Job		
	In corner existing				
	Bus Bar existing				
	12 step Digital APFC relay <b>Make Havells/L&amp;T/Schnidor. (If Required )</b>				

	Out goings:-				
	The all cables, thimbels, wires, power cables, ferrules also included as and where required inclusive of price.				
11	<b>Testing, comissioning of Existing VCB panel including termination of existing input and output cables with double compression gland for 1.1 kV grade, XLPE insulated, Al/ Cu Conductor cable complete as required. The testing report is to be submitted as per PSPCL requirement</b>	1	job		
12	Installation,Testing and comissioning of existing 12/24 DC Powerpack for charging the batten; at HT VCB Panels	1	job		
13	Supply Installation of CT/PT Meter box only as per PSEB	1	job		
14	Supply and installation of 10 no. 63amp, 4P, 25KA, MCCB in existing AC panel by removing existing switch and making arrangement in MCCB cover. Termination of existing 3.5x400sqmm al. armoured cable in existing panel and termination of existing 10 no. 4x16sqmm armoured copper cable in the panel with double compression gland for 1.1 kV grade, XLPE insulated, Al/ Cu Conductor cable. Supply, installation and connection of one 800amp four strips aluminium bus bar & connection with existing bus bar in panel and S/F of side panel sheet of size of 5.5ftx2.0ft having thickness of 2mm . Testing and comissioning of AC panel complete in all respect	1	job		
15	Supply and installation of 2 no. 63amp, 4P, 25KA, MCCB with encloser and end termination of existing two 4x16sqmm copper armoured cables. The items need to be installed on the rooftop near AC panel.	2	nos		
16	Testing and comissioning of existing transformer of 1000KVA complete as required to operationalise the transformer including dehydration of transformer oil.	1	Job		
17	<b>LT Cables</b>				
a	Supply, laying, testing & comissioning of following sizes of Al/ Cu. conductor 1.1 kV grade, armoured, XLPE insulated LT Cables/ Control Cables including necessary cleats, clamps etc. (Cables shall be partly laid in Pipes, O/H cable tray, on wall, buried in ground) <b>(Make- Ecko / havells/ polycab / skyline/ pyemen)</b>				
17.1	3.5C – 400 (AL.) Armoured XLPE Cable	60	Mtr		
17.2	3.5C – 300 (AL.) Armoured XLPE Cable	85	Mtr		
17.3	3.5C – 185 (AL.) Armoured XLPE Cable	20	Mtr		
17.4	4C – 16 (Cu.) Armoured XLPE Cable (AC outdoor to AC panel)	40	Mtr		
18.0	Supply, erection, testing & comissioning of following sizes of cable end terminations with double compression gland for 1.1 kV grade, XLPE insulated, Al/ Cu Conductor cable <b>(Makes- HNI / BBI / Commet)</b>				
18.1	3.5C – 400 (AL.) Armoured XLPE Cable	4	each		
18.2	3.5C – 300 (AL.) Armoured XLPE Cable	4	each		
18.3	3.5C – 185 (AL.) Armoured XLPE Cable	2	each		
18.6	4C – 16 (Cu.) Armoured XLPE Cable	10	each		

<b>19</b>	<b>COMMUNICATION</b>				
<b>19.1</b>	Networking for computer networking starting from mounting rack with UTP CAT-6 cable in existing raceway including providing and fixing I/O plates and SMB complete with all networking accessories etc complete as reqd. <b>Note:</b> flexible pipe not to be used any where. <b>(Make LUCENT/HCL /IBM/ AMP/ KRONE/DLINK/ MOLEX)</b>	40	Each		
<b>19.2</b>	Providing, fixing and testing of I/O plates and SMB complete with all networking accessories like RJ connector and ferruling with existing cat-6 LAN Cable etc complete as reqd. <b>Note:</b> flexible pipe not to be used any where. <b>(Make LUCENT/HCL /IBM/ AMP/ KRONE/DLINK/ MOLEX)</b>	250	Each		
<b>20</b>	Supply, installation, testing and commissioning of 24-port Patch Panel <b>(Makes LUCENT /HCL /IBM/ AMP/ KRONE/DLINK/ MOLEX)</b>	18	Each		
<b>21</b>	Supply, installation, testing and commissioning of mounted rack 15"	1	Each		
<b>22</b>	supply, installation, testing and commissioning of <b>factory made</b> patch cable CAT-6 complete with 2 no. connectors etc. complete as <b>reqd. Makes LUCENT /HCL /IBM/ AMP/ KRONE/DLINK/ MOLEX</b>				
<b>a</b>	(a) 1 mtr. Long	290	Each		
<b>b</b>	(b) 2 mtr. long	200	Each		
<b>c</b>	(c) Data cable CAT-6 with connector	300	Each		
<b>23.1</b>	wiring for telephone points with 0.5 mm dia 2 pair insulated annealed tinned electrolytic copper conductor in in existing raceway 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. <b>Makes Delta/ finolex / polycab</b>	40	Each		
<b>23.2</b>	Supply, fixing and testing of G.I. box including modular plate and cover in front on surface or in recess including providing and fixing modular type telephone socket outlet and making necessary connections with existing telephone cable etc. complete as reqd. <b>Makes Delta/ finolex / polycab</b>	160	Each		
<b>24</b>	Supply & fixing of 20 pair FRP/PVC/Metal junction box with KRONE	12	Each		
<b>25</b>	supply, installation, testing and commissioning of 20 pair telephone unarmoured cable as required. <b>(Make- finolex/delton/polycab)</b>	100	mtr.		
<b>26</b>	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. <b>(Makes- Finolex / polycab / havells / skyline / pyemen) Including 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 (Makes-Finolex / polycab / havells / skyline / pyemen)</b>				
<b>(a)</b>	Primary point ( light / fan controlled by one switch)	100	Each		

<b>(b)</b>	Two light point controlled by one switch	15	Each		
<b>(c)</b>	5AMP One plug point <b>(Anchor /Crabtree / North-West / REO)</b>	15	Each		
<b>(d)</b>	Supplying and fixing of 1 No.15 amp flush type 5 pin socket and 1 No. 16 amps switch cover plate, 5 sided G.I. Boxes for housing switches and sockets and earthing complete as required (for Power Point) GI Boxes to have earth pin for body earthing makes <b>(Anchor /Crabtree / North-West / REO) Including the cost of wiring 2x2.5+1x1.5 FRLS. PVC insulated copper conductor single core cable etc as required.(Makes-Finolex / polycab / havells / skyline / pyemen)</b>	10	Each		
<b>e</b>	Supply and fixing of 5amp modular switch with modular plate, suitable GI box and connection with existing copper wire.	40	Each		
<b>f</b>	Supply and fixing of plug point including providing 5amp modular switch and socket with modular plate, connection with existing copper wire and GI box.	10	Each		
<b>G</b>	Making necessary arrangements for shifting of Circuit wiring of Switch board inside record/locker room to near entrance door using wiring 2x2.5+1x1.5 FRLS. PVC insulated copper conductor single core cable etc as required.(Makes-Finolex / polycab / havells). The wires are to be terminated on industrial plug and socket mentioned at S.N. 7a.	7	JOB		
<b>27</b>	Supply and fixing of Heat shrinkable cable jointing kit for existing alluminium armoured cables of following size:				
<b>27.1</b>	3.5x400sqmm	4	Each		
<b>27.2</b>	3.5x300sqmm	4	Each		
<b>27.3</b>	3.5x120sqmm	2	Each		
<b>27.4</b>	3.5x95sqmm	2	Each		
<b>27.5</b>	3.5x70sqmm	2	Each		
<b>TOTAL PART-A</b>					
<b>PART- B</b>					
<b>1.1</b>	SITC of 36 watt recess mounted <b>LED Light panel</b> suitable for 2' x 2' modular/gypsum ceiling with assembly complete with including making necessary frames & connections etc. Complete as reqd. <b>Makes Philips / Crompton / Bajaj /Wipro</b>	15	Each		
<b>1.2</b>	Shifting of existing 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. to new location as per requirement	30	Job		
<b>2</b>	SITC of 15 watt recess mounted <b>LED down lighter</b> with assembly complete with including making necessary connections etc. Complete as reqd. <b>(Makes Philips / Crompton / Bajaj /Wipro)</b>	25	Each		
<b>3</b>	Supply and fixing of LED type fitting <b>20 watt, 4 feet</b> (Stair case, Electrical Panel room <b>etc.(Makes Philips / Crompton / Bajaj /Wipro)</b>	60	Each		

4	Supply and installation of Metal body 12" size medium duty exhaust fan model Drift Air. and louvr (Make:Crompton High Breeze/ usha	18	Each		
5	Supply and installation of 15" size medium duty exhaust fan heavy duty, 4 ploe. (Make: Crompton Breeze/ usha / Bajaj (Necessary framing, wall cutting & finishing to be done by Contractor)	4	Each		
6	Automatic Programmable Time Switch 24 Hour for Exhaust fan in UPS Room and Glow Sign Borad (Make: L&T or equivalent to Legrand/Havells/Seimens)	2	Each		
7	S/F of 48" Ceiling fan with regulator,hanging hook etc complete as reqd. Crompton High Breeze/ usha / Bajaj	10	Each		
8	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)	Blue Colour Cat No.LST 20 BL(M/s Crompton or equivalent of WIPRO , PHILLIPS, BAJAJ etc. )	50	mtr		
b)	Warm white Cat No. 38389 (M/S Philips or equivalent of WIPRO ,	50	mtr		
9	Supply, installation testing comiissioning of 3HP water lifting pump with Direct online starter of suitable rating (make kirloskar/Crompton/havells) in basement -1 and basement-2. The cost of removing existing pump to be include in the rates quoted	4	each		
<b>Total - Part B</b>					
<b>Total Part-A+B</b>					