

BOO FOR ELECTRICAL WORKS AT STATE BANK OF INDIA, HCPG COLLEGE BRANCH, RBO-I, AO VARANASI
SECTION-I- INTERNAL ELECTRICAL WORKS, WIRING FOR UPS AND AC

S. No.	Item Description	Unit	Qty	Rate	Amount
1	Providing & installation of one 63 Amp in 4P MCB to be of 10kA C series in existing DB(One in UPS DB and one in AC DB)	No.	2		
2	Dismantling and re-installation of existing TPN DB being used for AC	Set	1		
3	Providing & installation on angle iron frame of 2+8 way SPN distribution board with cover/door(plastic or ms) comprising of one 40 Amp in coming DPMCB and, eight 6A-10A outgoing SPMCB All MCB's to be of C series Complete Connection testing etc in all respect.(01 FOR UPS, one for ATM UPS and 1 for light/power circuit)	Nos.	1		
4	Providing & installation on angle iron frame of suitable MS MCB/DB enclosure ie 4 way SPNDB (Consumer unit) complete in all respect including earthing link etc comprising of C series MCBs. i)One 32/40 Amp ELCB/RCCB 300MA for UPS out put in UPS room, each circuits complete	Set	1		
5	S/FOne 25/32 Amp ELCB/RCCB 100MA, in a suitable MS box(make as approved in makes list) to be connected before the AC stabilizer, complete testing fixing / installation complete in all respect. (AC)	Set	2		
6	Providing & Installation on angle iron frame of manufactures sheet steel 20/25A socket board with cover and 2 pole & earth metal plug and socket /Modular socket board and 25/32 Amp SPMCB complete in all respect for air conditioners.	Nos	5		
7	DISTRIBUTION CABLE:				
	SUPPLY AND LAYING OF CABLE:				
	Supplying and laying of 1.1 KV grade aluminium conductor, PVC/XLPE insulated and sheathed, armoured cables of following sizes conforming to IS:1554 (Part-I) underground or on surface with 2 nos. of 8 SWG G.I. earth continuity wire all along the run with MS painted saddle and clamps made of 6 mm thick MS flat.				
	(a)3.5 core x 50 sq.mm.(UPPCL pole to Meter)	Mtr	40		
	(b)3.5 core x 25 sq.mm.	Mtr	50		
8	CABLE TERMINATION				
	End termination of 1100 V grade, armoured Al cable of following sizes using Dowells make Cugs and double compression brass cable gland where required.				
	(a)3.5 core x 50 sq.mm.	Set	2		
	(b)3.5 core x 25 sq.mm.	Set	12		
9	Supply, installation, testing and commissioning (SITC) of 2X6+1X6 sq. mm, 1100 V grade, FRLS, multi strand copper conductor PVC insulated wire in medium duty rigid or flexible PVC conduit as required preferably concealed in floor/wall including chase cutting and making good of damages or on surface including connections, complete in all respects.	RMT	90		
10	Supply, installation, testing and commissioning (SITC) of 2X4+1X4 sq. mm, 1100 V grade, FRLS, multi strand copper conductor PVC insulated wire in medium duty rigid or flexible PVC conduit as required preferably concealed in floor/wall including chase cutting and making good of damages or on surface including connections, complete in all respects.(from SP MCB DB in UPS room to SPN Dbs in hall for UPS powered sockets, for AC SPN DB & Power SPN DB)	RMT	200		
11	Supply, installation, testing and commissioning(SITC) of 2X2.5+1X2.5 sq. mm, 1100 V grade, FRLS multi strand copper conductor PVC insulated wire in medium duty rigid or flexible PVC conduit as required preferably concealed in floor/wall including chase cutting and making good of damages or on surface including connections, complete in all respects.	RMT	120		
12	Supply and fixing of 04 Nos 10 Amp Switch and 04 Nos. modular type Per point 16/6 Amp socket 5pin on suitable modular plate and manufacturers steel box including circuit wiring from SPNDB to computer socket board With FRLS 2.5sqmm PVC copper wire with 1100v grade flexible / stranded wires for Phase neutral and earth in PVC conduit on surface and floor concealed up to computer socket boards complete with MS saddle, fixing,connection, testing / commissioning in all respect for system/prn room on counters, tables, wall, as required by the Office.(One power board with 3 socket /switches & required wiring will be treated one point) Colour coding /ferule marking may be taken care. NOTE(i) One circuit to be connected with maximum 03 power Board. To avoid use of more number of PVC pipe 32/25/20 mm pvc pipe may be used ie as per IS For different SPNDBs separate circuit and PVC conduit to be used.	Points	6		
12A	Same as above but looped from the above 1 st Point to 2 nd point and 3 rd point .	Points	3		
13	Supply and burring of safe Earthing Electrode T-19(hot dip Galvanised), Length 3000mm, outer pipe 50mm, inner pipe 25, Terminal Dia 12mm, outer GI pipe of 16SWG And inner GI pipe of 12swg with Hot dip Galvanization up to 100 micron filled with crystalline conductive mixture (CCM) Having Anti corrosive & conductive property with 50 Kgs activated soil (BFC) capable of reducing the soil resistivity with good mixture of retaining capacity along with CI BOX with hinged cover and masonry housing (from electrode terminal to sw board, cost of GI strip will be extra). GI strip directly to be connected from GI pipe with double nut bolt and spring washer. Make: As approved in UPPWD & CPRI certified. (one for 2 + 8 way TPN DB in system room, one for panel safety and 02 for UPS body/isolation transformer, one earthing to be used for genset neutral)	SET	2		

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13A	As per SI No.24 with 25X3MM GI STRIP concealed on wall/floor up to Ist per meter point complete in all respect.	Mtrs	40		
13B	Providing & installation of 1x10SQMM PVC insulated copper wire in 20mm PVC pipe up to inside from earth station.(sl) in side of UPS room complete in all respect including fixing with nut and bolts (concealed on wall/floor).	Mtrs	80		
14	Supply & fixing, light, Fan & sw, socket point in System/UPS room/Printer room at suitable place as required by the branch, (03 point from UPS SPNDB /DPMCB for Main Hall and one point in UPS room, one in BM Chamber complete testing, commissioning in all respect with 1.5 sqmm PVC 1100v grade copper insulated wire for phase, Neutral and earth (if required)in PVC conduit (concealed on wall/floor and making the same). Item include modular switch socket, board, front plate etc. One sw should be near grill gate entrance, BM cabin, Hall and lobby.	Points	5		
15	Distribution wiring including circuit wiring TPND/SPND to Switch Board with 1100 V grade, PVC insulated, FRLS, multi strand Cu wire of size 2.5 sq. mm for P, N&E in ISI marked PVC conduit and point wiring from switch board to point outlet with 1100 V grade, PVC insulated, FRLS, multi strand Cu wire of size 1.5 sq. mm for P, N&E in ISI marked PVC conduit with same make accessories in concealed/surface or in double lock PVC casing/capping and with modular type switches in metallic modular box, front plate, cover plate, 3 plate ceiling rose, angular holder, with two internal earthing terminals/studs for earthing. Junction boxes to be covered with ISI mark 3 mm thick phenolic laminated sheet cover, brass screws and cup washers for cover fixing PVC conduit and other accessories. (i) All switch boards and regulators to be modular type, MS box should be 16 swg with 3 mm thick ISI marked phenolic laminated cover, brass screws and cup washers and Modular type 6/10 A switch/socket. (ii) Point wiring should be inclusive of continuous wire length(P, N & E) upto connection block of light fitting/fans. However, if there are more one light/fan point on one switch board than Neutral and Earth can be looped from one point to another point upto the 8 points/fittings with 1100 V grade, PVC insulated, FRLS, multi strand Cu wire of size 1.5 sq.mm. Beyond eight point new wire for neutral and earth from the switch board is to be provided (iii) Provision for fan regulators shall be electronic step type 400W rating. (iv) Ceiling fan point shall be provided with regulators wherever specified. The switch boards to be considered accordingly.				
A	One Light point controlled by one switch	Nos	50		
B	Two Light point controlled by one switch	Nos	10		
C	Call bell point(With supply and fixing call bell)	Nos	2		
D	Ceiling fan point(With Regulator)	Nos	2		
E	3 pin 6 A socket outlet point including socket and controlling switch (on switch board)	Nos	6		
F	3 pin 6 A socket outlet point including supply of 3 pin socket and controlling switch in MS box(16 SWG) modular type switch and socket to be mounted on wall (away from switch board on counters)	Nos	12		
19	Supply, installation, testing and Commissioning of power point having one no. 16 A modular switch and 16 Amp modular socket, modular metal board with FRLS 2.5sqmm cu wire for phase and neutral and 2.5sqmm cu wire for earth in medium duty PVC conduit including all accessories boxex as required, Maximum Point on one circuit should not exceed Two. For air purifier, TV, for office area, UPS room, guard room & entrance room at suitable place. (Record & stationary room to be connected through a lead or 3x1.5sqmm pvc copper wire in a thick PVC pipe to out side with 15Amp socket this will be paid extra) or as required by Office at suitable place) Circuit to be connected from lighting TPND/SPND, controlled by each point with each switch testing/commissioning in all respect. Cu wire of PVC 1100V grade insulated for phase, neutral and earth, concealed properly. Wiring to commence from lighting TPND/SPND/Fuse unit to switch board and then to the point connection testing etc in all respect as per Office requirement. In PVC conduit (concealed on wall/floor and making good the same).Item include supply & Installation of modular MS board, 15/20Amp switches, Sockets etc. complete for power board.	Points	10		
20	Supply, installation, testing and Commissioning of power point having Two nos. 6/10 A modular switch and two nos. 6/10 Amp modular socket, modular metal board with FRLS 2.5 sqmm cu wire for phase and neutral and 2.5sqmm cu wire for earth in medium duty PVC conduit including all accessories boxex as required, Maximum Point on one circuit should not exceed Two. For air purifier, TV, for office area, UPS room, guard room & entrance room at suitable place. (Record & stationary room to be connected through a lead or 3x1.5sqmm pvc copper wire in a thick PVC pipe to out side with 15Amp socket this will be paid extra) or as required by Office at suitable place) Circuit to be connected from lighting TPND/SPND, controlled by each point with each switch testing/commissioning in all respect. Cu wire of PVC 1100V grade insulated for phase, neutral and earth, concealed properly. Wiring to commence from lighting TPND/SPND/Fuse unit to switch board and then to the point connection testing etc in all respect as per Office requirement. In PVC conduit (concealed on wall/floor and making good the same).Item include supply & Installation of modular MS board, 6/10Amp switches, Sockets etc. complete for power board.	No.	8		
21	<u>Strong room, record room and locker room to be connected through a lead or 3X2.5sq mm PVC copper wire in a thick PVC FLEXI pipe to out side with 15Amp plug/socket (in side to be connected directly with proper connection – out side with power point.</u>	Point	2		

S. No.	Item Description	Unit	Qty	Rate	Amount
22	Fixing of <u>exhaust fan</u> heavy duty 300MM sweep/200MM sweep fresh air fan and making of hole on wall of proper size with nut, bolts / brackets complete installation testing / commissioning & connection. Complete in all respect in UPS, strong room, locker room & toilets etc.	Nos	2		
23	Installation of following items:				
	Light fittings in ceiling/surface	Nos	12		
	Wall fan/ceiling	Nos	8		
24	Wiring from TPNDDB to isolation transformer / Stabilizer and to UPS I/P (and earthing as provided) with 03 PVC copper wires of size point 10 mm ² for Phase & neutral in 20 mm PVC conduit, wire to be of 1100 V grade insulated with copper conductor. complete with ms saddle/fixing/connection testing commissioning etc. (separate medium circuit)	Mtrs	16		
26	Dismantling & re- installation of existing MCCB in new enclosure	No.	5		
29	Supply and Installation of Sheet steel metal enclosure for existing MCCB installed at Mains	Nos.	5		
	SUB TOTAL SECTION-I- INTERNAL ELECTRICAL WORKS, WIRING FOR UPS AND AC				
	SECTION-II: SUPPLY ITEMS LIGHT FITTINGS Wipro/ Phillips/Havells/Crompton/Bajaj				
1	Supply of 600mm X 600mm in Armstrong/POP false ceiling, full panel, 36/30 W, LED light fixture suitable for recess mounting complete in all respects with LEDs, driver, diffuser, housing complete in all respects. Acceptable Makes:Philips/Crompton/Bajaj/ Wipro/ Havells/Syska.	Nos	8		
2	Supply of LED in Armstrong/POP false ceiling, round/square, recess mounting Warm White/NW, 10-12W downlighter complete with LED, driver etc. Acceptable Makes: Philips/Crompton/ Bajaj/ Wipro/ Havells/Syska.	Nos	8		
3	Supply of LED on wall/ceiling, 1200mm, 1x18/20 W batten type light fitting complete with LED tubular lamp with driver, complete in all respects. Acceptable Makes: Philips/Crompton/Bajaj /Wipro/ Havells.	Nos	4		
4	Supply of 450 mm sweep, oscillating type, wall mounting multi speed wall fan with motor, Metal Body and Metal blades wire guard, control, complete in all respects. Acceptable Makes: Crompton/Bajaj/ Usha/ Havells/Usha/Khaitan	Nos	8		
	SUB TOTAL SECTION-II: SUPPLY ITEMS				
	NET TOTAL FOR ELECTRICAL, LIGHT FITTINGS & FIXTURES				
					Plus GST

Note :Rates are considered inclusive of all except GST. GST shall be admitted additionally at prevalent rates/rules