

NAME OF WORK: ESTIMATE FOR ELECTRICAL WORKS AT SME GUNTUR

SI No	Description	Unit	Qty	Unit Rate	Total amount
1	DISTRIBUTION BOARDS:- Supply, installation and concelling/surface of following size MCB/MCCB/RCBO distribution boards with following combination of C curve-MCBs as required. the scope of work includes supply of blanking paltes for Vacent slots.				
a	MCCB NEAR ENERGY METER/ PANEL BOARD Supply & Installation of 125A,4Pole, 25KA MCCB in a fabricated IP 65 enclosure near Energy Meter (MCCB should not visable to outside.	No	1		
b	Master Control DB: Supply & fabrication of free stnading wall mounted M V panel made out of 14SWG MS sheet after seven tank process and painting with epoxy powder coating with vertical cubicles as detailed below. CUBICLE-1: 100A,4P,25KA MCCB with vary deep extendable handle -1 no CUBICLE-2: 63A, 4P Changeover(Manual Transfer Swtich-MTS) with vary deep extendable handle-1no. Note :install panel at the second entry. if there is no second entry install the same near main entrance.	No	1		
c	PDB/Main DB: 3 phase 4 way Ekinox ³ TPN DB-VTPN DPX ³ 160 MCCB DB's IP 43 - #IK 09 with metal Double door:- (1) 100A, 25KA, 4P, MCCB-1 no (input Master Control DB cubicle-1)) (2) 63A, 3P, MCB- 02 NO (I/P to AC DB, COS) (3) 40A, 3P, MCB-01 No,(I/p to Capacitors) (4) 6-32A, SP MCB-3 No (Spare) Note: for indicating lamps, tap the power supply from output of incomer	No	1		
d	AC DB 3 phase 6 way Ekinox³ TPN DB-VTPN DPX³ 160 MCCB DB's IP 43 - #IK 09 with metal Double door:- (1) 100A, 4P, MCCB-1 no (input from PDB) (2)63A,4P, 100mA, RCCB-1 no (Input) (3) 63A,3P, MCB- 06 NO (AC ODU)	No	1		

e	CHANGEOVER SWITCH(COS): SITC of <u>fabricated 100A, 4 pole on load Change over switch</u> with provision for the service cable termination as required. (1) Input-1: From PDB (2) Input-2: From DG set (3) Output: 7 segment display(LDB) and MTS 2nd Input.	No	1		
f	LDB/RAW POWER DB Ekinox ³ TPN DB - 6way 7 segment DB's for DX ³ MCB, Isolator, RCCB and RCBO :With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP MCB's as (1) 40 A 4 Pole MCB-1no (Input From COS) (2) 40A 2P 30mA RCCB-3no (3) 6-10A SP MCB-18no for raw power sockets and light point circuits	No	1		
g	OUTPUT OF MTS Ekinox ³ 4 way ETPN DB's for DX ³ MCB, Isolator, RCCB and RCBO IP 43 - #IK 09 with Double door. (1) 63A, 4P, MCB-1no (Input from main DB MTS) (2) 40A, 2P, MCB-1no (Branch UPS I/P) (3) 6A, 2P, MCB-1no (sign board I/P) (4) 6A, 2P, MCB-1 No (exhaust fans in UPS room)	No	1		
h	CAPACITOR PANEL. Supply, installation, testing and commissioning of 3 no. of 5KVAR heavy duty capacitor box type. The scope of work includes supply & fixing of 1 no. of 16A TP MCB and its related work	No	0		
i	MCB WITH ENCLOSURE FOR CASSETTE AC(1 PH) SITC of 20A 2 pole MCB in a suitable weather proof enclosure for cassette Acs	No	0		
	MCB WITH ENCLOSURE FOR CASSETTE AC(1 PH) SITC of 20A 2 pole MCB in a suitable metal enclosure for cassette Acs	No	6		
j	MCB WITH ENCLOSURE FOR CASSETTE AC(3PH) SITC of 32A 4 pole MCB in a suitable metal enclosure for cassette Acs	No	6		
	MCB WITH ENCLOSURE FOR CASSETTE AC(3PH) SITC of 32A 4 pole MCB with 40A 30ma RCCB in a suitable weather proof enclosure		6		
	UPS & RELATED DBS				
k	UPS INPUT DB: DP/TP/FP Metal enclosure with 1 no of 32A 4 P MCB for 7.5 to 10 KVA UPS.	No	2		
l	UPS OUTPUT DB DP/TP/FP Metal enclosure with 1 no of 63A DP MCB for 7.5 to 10KVA	No	2		

m	UPS OUTPUT DISTRIBUTION DB NEAR UPS SPN 8 way IP 43 - #IK 09 with metal Double door DB for UPS sockets. The scope of work includes supply & fixing of following MCBs: (1) 32A DP MCB-1NO, (2)6-32A SP MCB-6NO (Hub/NETWORK RACK,CCTV, Fire panel, Burgalarm and Distribution boards in banking hall)	NO	1		
n	UPS DB IN BANKING HALL SPN 8 way IP 43 - #IK 09 with metal Double door DB for UPS sockets. The scope of work includes supply & fixing of following MCBs: (1) 32A DP MCB-1NO, (2)6-10A SP MCB-6NO	No	0		
o	UPS DB IN BANKING HALL SPN 12 way IP 43 - #IK 09 with metal Double door DB for UPS sockets. The scope of work includes supply & fixing of following MCBs: (1) 32A DP MCB-1NO, (2)6-10A SP MCB-10NO	No	2		
p	ATM UPS DB SPN 8 way IP 43 - #IK 09 with metal Double door DB for UPS sockets. The scope of work includes supply & fixing of following MCBs: (1) 32A DP MCB-1NO, (2)6-10A SP MCB-6NO	No	0		
q	ATM RAW POWER DB (TO BE INSTALLED INSIDE THE ATM) 7segment 4 way DB's IP 43 - #IK 09 with Double door. (1)32A,4P, MCB-1no(Input) (2)40A,100mA,1P RCCB-2 no (Input for lighting & AC) (3)32A, 2P, MCB-1no(ATM UPS I/P) (4) 32A,2P MCB-1 no (ATM AC) (5)10A,2P, MCB-1no(ATM lighting SB) (6)6A,2P, MCB-2no (ATM sign board & Banking Hall Sign Board)	No	0		
2	ARMoured CABLES FOR DB INPUT, CASSETTE ACS & UPS INPUT DB:- Supply,Laying, Testing and commissioning of 1.1 KV grade XLPE insulated armoured alluminium/copper conductor cable of the following size including laying in trenches, cable trays, on wall including claming and including civil works etc complete as per IS 7098 - Part 1 - 1983. The scope of work includes supply & laying of 2 runs of 8 SWG GI wire along with the cable				
a	3.5C X 70 SQMM ALU CABLE	Rmt	90		
b	3.5C X 50 SQMM ALU CABLE	Rmt	90		
c	3.5C X 25 SQMM ALU CABLE	Rmt	35		
d	4C X 16 SQMM CU CABLE	Rmt	0		
e	4C X 10 SQMM CU CABLE	Rmt	0		
f	4C X 6 SQMM CU CABLE	Rmt	150		

g	4C X 4 SQMM CU CABLE	Rmt	150		
h	3 C X 4 SQMM CU CABLE	Rmt	100		
i	3 C X 2.5 SQMM CU CABLE	Rmt	0		
3	TERMINATIONS: Termination of the following cables with double compression(DC/ Single compression(SC) cable glands and also with suitable size aluminium/copper lugs including supply and fixing of Lugs.				
a	3.5C X 50 SQMM ALU CABLE (SC)	No	4		
b	3.5C X 35 SQMM ALU CABLE (SC)	No	4		
c	3.5C X 25 SQMM ALU CABLE (SC)	No	4		
d	4C X 16 SQMM CU CABLE (SC)	No	0		
e	4C X 10 SQMM CU CABLE (DC)	No	4		
f	4C X 6 SQMM CU CABLE (DC)	No	0		
g	4C X 4 SQMM CU CABLE (DC)	No	12		
h	3 C X 4 SQMM CU CABLE (DC)	No	14		
i	3 C X 2.5 SQMM CU CABLE (DC)	No	10		
4	UPS INTERNAL WIRING				
	Supply , laying and dressing of following 1.1KV XLPE Insulated, PVC tape/PVC Extruded Innersheathed for Multicore copper flexible Cables , extruded PVC Type ST2 Sheathed, 650/1100 V grade as per IS 7098 (Part 1) 1988. The scope of work includes laying of cable in a suitable metal hose flexible pipe .complete the work as directed by theSBIIMS. the cable should be laid from UPS I/P to UPS I/P enclosure & UPS O/P to UPS ouput enclosure only.				
a	3 core X 4 sqmm coppe flexible cable	Rmt	35		
5	AC WIRING				
a	SPLIT AC WIRING:- Supply and Fixing of 20 A DP MCB fixed on a suitable module metal box including all interconnections as required. (for High Wall Spli ACs) along with supply & laying of 3 C* 4 sqmm copper armoured cable concealed on wall/ Ceiling etc as required. The wires should be conforming to IS 694 (with latest amendments).The scope of work includes wiring from AC DB to DP MCB to AC unit .	No	2		

6	GLOW SIGN BOARD:- Supply & laing of 3core 1.5sqmm Copper flexible Cable in a suitable FRLS PVC pipe for Glow Sign Board including all terminations	Rmt	45		
7	EMERGENCY LIGHTING(UPS SUPPLY) Supply & laying of 3 core 1.5 sqmm copper flexible cable in a suitable FRLS PVC pipe for emergency lighting. The scope of work includes supply & fixing of 2A DP MCB in a suitable enclosure. No of points :One primary point & two secondary points. The scope of work extends to supply & fixing of 3 no of square type 15 watts recess mounted LED lights also.	No	1		
8	LIGHT & FAN POINT WIRING:- Point Wiring for Light/fan point with 3X1.5 sqmm copper conductor FRLS insulated 1100v grade multi strand wires (P+N+E) in concealed/ surface using 20/25/32 Medium duty FRLS PVC conduit 16swg thick with all bend, tees, saddle mounting box, cover plate, ceiling rose, etc. complete as required etc. The scope of work includes the circuit wiring from DB to point control box /switch box using 3x2.5 sq mm copper conductor FRLS insulated 1100V grade multistrand wire (P+N+E) in FRLS PVC conduit 16 swg thick complete in all respect. Each circuit shall have separate earth wire. All switch socket must be modular type with M.S. Boxes and plate etc. as required.				
a	Primary points	No	80		
b	same as the above secondary point (only one secondary point on the primary point	No	20		
c	one switch controlled by three lights	No	0		
d	Call bell points for the cabins including supply of call bell as required	No	1		
9	MODULAR SOCKETS: Supply and fixing of switch(s) & socket(s) fixed on a suitable module metal box(16 guage) and white front plate (Modular type) including all interconnections as required and blank plate has to be provided if necessary. The scope of work extends to Supply and wiring with <u>2runs of 4.0 sq.mm & one run of 2.5sqmm</u> 1100 V grade PVC insulated multi strand <u>FRLS copper conductor wires</u> conforming to IS 694 (with latest amendments) in suitable size FRLS PVC CONDUIT of 2mm thick concealed in the above ducts in the floor and supply of all fixing materials and accessories, interconnections complete as required for the UPS/ raw power sockets in the single window counters and officer tables.				
a	PRIMARY POINT: RAW POWER 1 no of 6/16A socket with 1 no of 16A switch For power point in banking hall cooler, Kitch	No	3		

b	PRIMARY POINT: RAW POWER 2 nos of 6/16A socket with 2 no of 16A switch For Kitchen	No	3		
10	Supply and fixing of switch(s) & socket(s) fixed on a suitable module metal box(16 guage) and white front plate (Modular type) including all interconnections as required and blank plate has to be provided if necessary. The scope of work extends to Supply and wiring with <u>3runs of 2.5 sq.mm</u> 1100 V grade PVC insulated multi strand <u>FRLS copper conductor wires</u> conforming to IS 694 (with latest amendments) in suitable size FRLS PVC CONDUIT of 2mm thick concealed in the above ducts in the floor and supply of all fixing materials and accessories, interconnections complete as required for the UPS/ raw power sockets in the single window counters and officer tables.				
a	PRIMARY POINT- RAW POWER 1nos6/16A Socket and 1nos 16A switch (Rawpower point switch and socket to be installed in a metal box) . The scope of work extends supply of <u>3 meter length of flexible 3core 2.5sqmm multi core copper cable</u> one end connected to <u>plug top 16A</u> and the other connected to the SB inside and a suitable hook arrangement as required for hanging the cable required for Record rooms & Safe room, LOCKER room, Strong room, stationary room(Independent Circuits)	No	3		
b	PRIMARY POINT- RAW POWER 1nos6/16A Socket and 1nos 16A switch (Rawpower point switch and socket to be installed in a metal box) . The scope of work extends supply of <u>3 meter length of flexible 3core 2.5sqmm multi core copper cable</u> one end connected to <u>plug top 16A</u> a required for ATM(Independent Circuits)	No	10		
c	PRIMARY POINT:UPS POWER <u>4nos. 6A sockets</u> with <u>1 no 16A switch</u> for NET WORK RACK, CCTV etc)	No	5		
11	Supply and fixing of switch(s) & socket(s) fixed on a suitable module metal box(16 guage) and white front plate (Modular type) including all interconnections as required and blank plate has to be provided if necessary. The scope of work extends to Supply and wiring with <u>3runs of 2.5 sq.mm</u> 1100 V grade PVC insulated multi strand FRLS copper conductor wires conforming to IS 694 (with latest amendments) in suitable size <u>FRLS PVC CONDUIT</u> of 2mm thick concealed in the above ducts in the floor and supply of all fixing materials and accessories, interconnections complete as required for the UPS/ raw power sockets in the single window counters and officer tables. if these sockets are mounted in SB (along with point wiring) we will treat it as on board socket.				

a	PRIMARY POINT:UPS POWER 4nos. 6A sockets with 1 no 16A switch (Switch shall be fixed above the table and sockets shall be fixed below the counters)	No	20		
b	PRIMARY POINT: RAW POWER 2nos 6A Sockets with 1 No of 6A switch (Raw Sockets)- for counters(Switch & Socket should be mounted above the table	No	20		
c	SECONDARY POINT: RAW POWER (2 X6A socket & 1 X6A switch) same as above but looped from nearest point (Primary point to Secondary point) from counter to counter	No	10		
d	PRIMARY POINT:UPS/ RAW POWER 2 nos of 6A socket with 2 no of 6A switch for display,coin vending machine, pass book printing	No	0		
e	PRIMARY POINT: UPS/RAW POWER 1 nos of 6A socket with 1 no of 6A switch for fire panel	No	5		
12	Supply and fixing of switch(s) & socket(s) fixed on a suitable module metal box(16 guage) and white front plate (Modular type) including all interconnections as required and blank plate has to be provided if necessary.				
a	ON BOARD SWITCH & SOCKET 1 no of 6A socket with 1 no of 6A switch and it should be fixed in the switch board -RAW POWER	No	10		
b	SOCKET FOR WALL MOUNTING FAN 1 no of 6A socket 3" below the false ceiling for wall mounting fan - RAW POWER	No	10		
13	SUPPLY & FIXING OF EXHAUST FANS WITH TIMER Supply & fixing of 2 no of bird cage exhaust fans with timer control for the exhaust fans in the UPS room. The scope of work includes point wiring & making provision in the wall for installation of exhaust fans and bring back to original finish.	No	1		
14	TELEPHONE WIRING				
	POINT WIRING Supply, installation, testing and commissioing of high Conductivity Solid Annealed Bare Copper industrial 0.5mm dia Telephone (Switchboard) Cables with High Density Polyethylene Insulation, Paired, Polyester and Sheathed with High Oxygen Index, Fire Retardant, PVC Compound, Grey Outer Sheath generally conforming ITD Specification. the scope of work inclusive of all fixing accessories & laying in a suitable ISI medimum PVC conduit. The scope of work extends to Supply and Fixing of modular type RJ11 Telephone outlet with anodized GI box and front plate complete as required.				
a	2 pair	No	15		
15	KRONE ENCLOSURE				

	Supply, installation, testing & commissioning of Telephone krone in an MS powder coated enclosure for the following sizes..				
a	10 PAIR KRONE	No	1		
16	FIXTURES/FANS(All light fixtures and fans to be supplied COMMERCIAL MODELS only)				
	Supply & Installation of following type direct/ indirect type recess/surface/ wall mounted light fixtures. The fixtures shall be installed including supply and wiring between Ceiling rose to fixture with supply and laying of 3core 1.5Sq.mm copper flexible cable and fixing of Lamp with all required accessories, support chains & interconnections etc. including cost and conveyance of all materials, taxes and all labor charges etc., complete.				
a	Supply & Installation of 15W Led down light fixture. (Havells:- Integra neo 15W, 857 CROMPTON: LCDRQ-15-CDL/LCDRO-15-CDL or DN296B LED15S 6500K in Philips or equivalent) including cost and conveyance of all materials, taxes and all labor charges etc., complete.	No	40		
b	Supply & Installation of 33-36W 2X2 LedLight fixtures (Havells - PLANO2X2PLR36WLED857S / VENUSNEOHE2X2PLR34WLED8XXS or CROMPTON: LCTLRNE-36-FO-CDL or Philips RC 375B30S 6500K or Equ) including cost and conveyance of all materials, taxes and all labor charges etc., complete. Weight of the light should not be on the grid/ Gypsum ceiling. light has to be fixed with the help of GI/chain wires and to the anchored to the ceiling.	No	60		
c	Supply & Installation of 610x610 LedLight fixtures Frames including cost and conveyance of all materials, taxes and all labor charges etc., complete.	No	0		
d	Supply & Installation of 9-12W T5 led Light fixtures and giving connections and all labour charges etc., complete for erection. (LUMILINEBS9WLED857SPCWH - Havels or BN021-12S in Philips or Equ)	No	5		
e	Supply and Installation of 18-20W T5 fixtures SURFACE type with all interconnections and fixing arrangement as required. (LUMILINEBS18WLED857SPCWH - Havels or BN021-21S in Philips or CROMPTON: LDL-20-CDL or equivalent)	No	12		
f	supply & fixing of 20 watts per meter rope lights	Rmt	0		
g	WALL MOUNTING FANS Supply and Fixing of metal(body & Blades) wall mounted fans with 3 pin socket, fan body should be earthed if 3 pin socket not available in the market .(BM,counters,Server RM, Field Officer,), Make: Storm model in CG or equivalent	No	10		

h	EXHAUST FAN:- Supply & Installation of fresh air exhaust fan 50W of light duty 300mm size (12"), Metallic body & blades, wire mesh, bird louvers etc. including cost and conveyance of all materials, taxes and all labor charges etc., complete for erection	No	4		
i	CEILING FAN:- supply & Fixing of 1200mm sweep 5 star High speed ceiling fan with electronic step regulator in suitable locations as required. And Supplying of double anchor fastener hooks and down rods . complete in all respects as directed by Bank. CG/ Havells	No	8		
17	Earthing:				
a	COPPER EARTHING: Providing independent earthing for sophisticated electronic equipment with 600 mm x 600 mm x 3.5 mm thick copper plate rigidly fixed to 40 mm dia G.I. pipe of 3 mtr length connected with reducer providing .GI. funnel with wiremesh as per national electric code including C.C. Chamber of size 400 mm x 400 mm x 400 mm covered with RCC slab filling with salt and charcoal giving earth connection from electrode copper strip 2 runs of 50 mm x 6 mm x 3000 mm length with all accessories and labour charges complete, as per IS specifications 732/1982 (Part II)	No	2		
b	GI EARTHING: Providing independent earthing for important equipment with 40 mm dia "B" class 2.5m long G.I pipe and 19mm dia "B" class G.I pipe of 0.3 mtr. Long connected with reducer providing G.I. funnel with mesh enclosed in C.C. Chamber of 400mm x 400 mm x 400 mm with RCC slab cover duly providing staggered holes filling with salt and charcoal from the bottom of the pipe giving earth connection from electrode through G.I. strip 2 runs of 50 x 6 mm x 3000 mm length with all accessories and labour charges complete, as per IS specifications 732/1982 (part II)	No	2		
c	Supply and laying of 8SWG Cu bear conductor in 20mm dia rigid pvc conduit For Body	Rmt	50		
d	Supply and laying of 8SWG GI bear conductor in 20mm dia rigid pvc conduit For Body	Rmt	50		
e	Supply & Laying of 100mmX 25mmX 5mm Copper strip with supporting insulator and holes	no	2		
f	Supply & Laying of 100mmX 25mmX 6mm GI strip with supporting insulator and holes	No	2		
18	ELECTRICAL SAFETY & INDICATION ITEMS				

a	"Supply & laying of ISI marked Electrical Insulating dotted floor mat of dimension 2000 x 600mm 12mm thick in Electrical / UPS room -IS 15652:2006"	No	1		
b	"Preparing single line diagram for power & LAN (from source to end point), lamination(A3 size) & installation on wall and submit the soft copy of autocad & PDF formats.". The scope of work includes showing of cable size and length in the SLD.	Job	1		
c	"Supply & installation of Laminated Electrical Shock Treatment Chart (50x75cm) in UPS / Electrical Room."	No	1		
d	Danger Boards (English, Telugu & Hindi languages) in metal sheet at entrance of electrical room.	Each	1		
e	Danger boards sticker on DBs	each	1		
f	First Aid kit with complete set of medicines	Each	1		
g	Supply & Installation of 3 no of 3watts(R,Y,B) bulbs in a suitable enclosure For indicating the electricity board supply. The scope of work includes wiring from DB.	No	1		
h	Security Lights: Supply and installation of 6 Nos. of 6-10 Watts LED Bulk head ligths (Philips: WT140 C LED 7S CW PSU GR, or its equalent in Havells and Bajaj), the scope of work includes, (a) Supply & Installation of 24 hr. timer in manufacturer's own enclosure (Legrand, Hager, L&T). (b) Point wiring for the above security lights with 3R x 2.5 Sq. mm. FRLS Copper flexible wire in a suitable FRLS PVC conduit around peripherty of teh building.	No	0		
19	Arrangements of temporary power, Lighting, UPS wiring etc without effecting the operation of the branch working hour.Liasioning with the supply authorities and other Government bodies for enhancement of power load . If any official fee payable to AP Power Distribution company will be reimbursed by the Bank. Meaning of Temporary Power: vendor has to lay suitable copper flexible cable from UPS/ raw power to counters with a protection of ELCB and laying of LAN cable also	Job	1		
20	BUY BACK (amount to be paid to the Bank)				
	Removing and taking away on as is where is basis of the following items from the branch with prior approval of the Bank after making payments.				
a	2X2 light fittings	no.	0		
b	Spot light fittings	no.	0		
c	CFL	No	0		
d	cables & old DB unused	LS	0		

	TOTAL ESTIMATED AMOUNT (Excluding GST)	