

SME, ANANTAPUR BRANCH
Estimate for Electrical Installation Works

Sl.No.	Description	UOM	Qty.	Rate (Rs.)
1	Supply, installation, testing and commissioning of 100 A 4P change over switch in sheet steel enclosure for changing over from main line to generator line.	Set	1	
2	Main Panel: Supplying, Installing, testing and commissioning of fabricated floor cubicle type distribution Panel Board suitable for 415 V comprising of 3 Nos. 50 mm X 6 mm for phase and 40 mm X 6 mm for neutral copper bus bars with the following: 1 no. 250 A 4P MCCB of 35kA breaking capacity at incoming 1 no. 100 A 4P MCCB of 35 kA breaking capacity (for ESDB), 125 A 4P MCCB of 35 kA breaking capacity (for AC panel), 1 no. 63 A 4P MCCB (for capacitor panel) at outgoing in compartmentalized chamber fully isolated with 2 mm thick steel sheet and 3 mm steel channel painted with 2 coats of red oxide primer paint followed by finishing paint with interconnection etc. as required. The price is to be inclusive of phase indicator lamps, multi functional meter etc.	No.s	1	
3	Supply, installation, testing & commissioning of 6 stage Automatic Power Factor Control Panel (APFC Panel) of 28 KVAR capacity (10+5+5+3+3+2 KVAR capacitors) as below: 10 A 4P MCCB as incomer. Three Pole MCBs and Heavy duty contactors for outgoing 40 A for 10 KVAR, 32 A for 5 KVAR and 16 A for 3 KVAR and 2 KVAR Necessary APFC Relay, power and control wiring with 1.1 KV grade copper wire suitably rated and sensing CT as required.	No.s	1	
4	Supply ,installation ,testing and commissioning of Essential services DB:- VTPN DB – IP 43-IK 09 - approved make) comprising of 100 A 4P MCCB of breaking capacity 35KA at incoming and 1 No. 63 A TPMCB (for light db), 1 no. 40 A SPMCB (for UPS INCOMER), 1 nos of 40A TP MCB (for Raw power DB) & 3 No. of 20A SP MCB (for System room / BM room ac, Glow sign board Lighting & spare) at outgoing with inter connection in PVC insulated color coded wire in PVC conduit cable socket including loop earth connection to earth bus bars etc. all complete including mending good the damage and painting. The MCCB should have adjustable overload setting With load/line interchangeability with thermo magnetic /static release.	No.s	1	
5	Supply ,installation ,testing and commissioning of AC DB: VTPN DB – IP 43-IK 09 - approved make) comprising of 125 A 4P MCCB of breaking capacity 35KA at incoming and 2 No. 63 A TPMCB (for individual 8.5 TR ductable AC incomers), 6 no. 32 A SPMCBs at outgoing with inter connection in PVC insulated color coded wire in PVC conduit cable socket including loop earth connection to earth bus bars etc. all complete including mending good the damage and painting. The MCCB should have adjustable overload setting With load/line interchangeability with thermo magnetic /static release.	No.s	1	
6	Supply, installation, testing and commissioning of TPN Light DB: TPN DB with 63 A 4P RCBO as incomer and 3 no. 40 A DPMCB at outgoing to individual SPN light DBs	No.s	1	
7	Supply, installation, testing and commissioning of Light DB, SPN double door with 40A DP MCB as incomer & 10 nos 10A SP MCB as outgoing.	No.s	3	
8	Supply, installation, testing and commissioning of TPN Raw Power DB: TPN DB with 40 A 4P RCBO as incomer and 3 no. 40 A DPMCB at outgoing to individual SPN Raw Power DBs	No.s	1	
9	Supply, installation, testing and commissioning of SPN Raw Power DB, SPN double door with 40A DP MCB as incomer & 10 nos 10A SP MCB as outgoing.	No.s	3	
10	Supply, installation, testing and commissioning of UPS incoming and outgoing DB: DP MCB box with 40 A DPMCB	No.s	2	
11	Supply, installation, testing and commissioning of UPS distribution DB: SPN Double door DB with 40 A DP MCB as incomer and 2 no. 32 A DPMCBs at out going	No.s	1	
12	UPS Computer DB, SPN double door with 40A (30mA)DP RCCB as incomer & 5nos 10A SP MCB as outgoing.	No.s	2	
13	Supply, installation, testing and commissioning of DB with 63A TP MCB for ductable AC input control (11 TR capacity)	No.s	2	
14	Supply, installation, testing and commissioning of 20A industrial plug socket in metal clad with 20A SP MCB	No.s	5	
15	Supply, installation, testing and commissioning of DB with 63 A 4P MCB for master control of lights at entrance gate	No.s	1	

16	<p>AC point wiring: Wiring in PVC conduit of IS specification of Proper size with core PVC insulated stranded copper wire 1.1 KV grade and with all materials supply ,installation connection complete as per circuit diagram and as required from ESDB to AC points at BM / Server room with 3 no. 4 sq. mm (Phase, Neutral and Earth)</p>	RM	100	
17	<p>Sub-main line Wiring: Wiring in PVC conduit of IS specification of Proper size with core PVC insulated stranded copper wire 1.1 KV grade and with all materials supply ,installation connection complete as per circuit diagram and as required from main DB to various DBs: With 3nos 6sq.mm (Phase, Neutral and Earth) from -UPS to UPS out going Dbs -UPS outgoing DB to UPS computer DB -TPN light DB to SPN light DBs TPN Raw power DB to SPN Raw power DBs</p>	RM	150	
18	<p>Sub-main line Wiring: Wiring in PVC conduit of IS specification of Proper size with core PVC insulated stranded copper wire 1.1 KV grade and with all materials supply ,installation connection complete as per circuit diagram and as required from main DB to various DBs: With 5nos 6sq.mm (R,Y,B, Neutral and Earth) from ESDB to TPN light DB ESDB to TPN Raw power DB</p>	RM	100	
19	<p>AC ductable machine Wiring: Wiring in PVC conduit of IS specification of Proper size with core PVC insulated stranded copper wire 1.1 KV grade and with all materials supply ,installation connection complete as per circuit diagram and as required from main DB to various DBs: With 5nos 10sq.mm (R,Y,B, Neutral and Earth) from Ductable AC control MCB to Ductable AC ODU</p>	RM	50	
20	<p>Cabling:Supply and laying of following sizes of PVC/XLPE insulated and PVC sheathed 1.1 kV grade aluminum conductor LT armoured UG cable laid in ground/partially in air including excavation of cable trench upto depth of 75 cm. Refilling, protective brick covering, sand cushioning etc. complete handling of surplus soil, debris etc. to proper place as well as fixing to the walls with saddles, cable glands for connecting to the panels and appropriate end termination with copper lugs and providing of 2 nos. of 8 SWG GI wires as specified and directed by the department 3.5 core X 50 sq. mm (from main line to Panel incoming)</p>	RM	85	
21	<p>Cabling:Supply and laying of following sizes of PVC/XLPE insulated and PVC sheathed 1.1 kV grade aluminum conductor LT armoured UG cable laid in ground/partially in air including excavation of cable trench upto depth of 75 cm. Refilling, protective brick covering, sand cushioning etc. complete handling of surplus soil, debris etc. to proper place as well as fixing to the walls with saddles, cable glands for connecting to the panels and appropriate end termination with copper lugs and providing of 2 nos. of 8 SWG GI wires as specified and directed by the department 3.5 Core X 25 sq. mm (from main Panel to Change over switch and COS to ESDB and Main panel to AC DB, from AC DB to ductable AC incomer control MCB)</p>	RM	150	
22	<p>Computer point wiring in PVC conduit of IS specification of proper size with 3nos 2.5sq.mm single core PVC insulated stranded copper wire 1.1KV grade and with all material supply installation and commissioning complete from CDB/PDB(Raw) .The wiring shall be carried out on surface above false ceiling and concealed in the wall by chiseling the existing surface and plastering the same with cement etc. after fixing the pvc conduit with all accessories like saddles screws, bends T-joint etc. 2 coats of painting Matching to the surface including supply installing, testing, commissioning of modular plate type switch and socket for computer terminal on sheet steel enclosure (cadmium plated),duly fitted with screw to the steel conduit and fixed to the wall partition furniture with all interconnection and proper earthing .All the opening shall be covered with blank plate and be sealed to make the box vermin proof.</p>			
23	<p>UPS point for SWC & branch Manager table: 4 no. 6A sockets fixed below the table, to be controlled by one no. 16 A modular DP switch above the table / counter. The boxes are to be fixed on the partitions by suitably chiseling / cutting, making good the damage.</p>	Set	5	

24	UPS & Raw power point for SWC and other work stations: 2 no. 6A sockets fixed below the table to be controlled by one no. 16 A modular switch above the table / counter. The boxes are to be fixed on the partitions by suitably chiseling / cutting, making good the damage.	Set	15	
25	Raw power point: 1 no. 6 / 16 A controlled by 16 A switch. The boxes are to be fixed on the partitions by suitably chiseling / cutting, making good the damage.	Set	5	
	General Wiring for light/fan/exhaust fan points using 3 X 1.5 1.1 kV grade PVC insulated stranded copper conductor wire for phase, neutral and earth in 25 mm dia heavy duty PVC conduit along with associated accessories like MS junction boxes, bends, saddles, screws etc. concealed in wall, floor, under flooring, below false ceiling or on surface as well as suspended from ceiling with 25mm X 3 mm MS flat suspenders duly painted above false ceiling from individual light/Fan/Exhaust Fan point outlet. etc. to individual modular type switch boards, 6 Amp modular plate type switches etc., as required complete including circuit wiring with 3 X 2.5 sqmm. 1.1 kV grade PVC insulated stranded copper conductor wire and mending good to damage and as per site requirement and as instructed by engineer. All the opening shall be covered with blank plate and be sealed to make the box vermin proof.			
26	2 no. of lights controlled by one switch	Set	25.00	
27	1 no. of lights by one switch.	Set	40.00	
28	Wall bracket fans / exhaust fan controlled by 6A switch at switch board and 1 no. 6 A socket in MS box at ceiling level.	Set	20.00	
29	Ceiling fans with electronic regulators	Set	10.00	
30	6 A light plug controlled by 6 A switch on the same switch board	Set	12.00	
31	Call bell point for Branch Manager chamber along with the supply of call bell	Set	1.00	
32	6A light plug socket with 6A switch wiring including all accessories, as per the branch requirement in the banking hall	Set	10	
33	Wiring for glow sign board with 3 X 4 sq.mm 1.1 kV grade PVC insulated stranded copper conductor wire for phase, neutral and earth in 25 mm dia heavy duty PVC conduit along with associated accessories like PVC junction boxes, bends, saddles, screws etc.	Set	2	
34	Supply, installation, testing and commissioning of 1.1 kV grade 2.5 sq. mm flexible copper cable 3 meter length connected at one end with 15 A three pin socket and other end connected permanently to the switch board of safe room / locker room	Set	2	
35	Supply, installation, testing and commissioning of 1.1 kV grade 4.0 sq. mm flexible copper cable 3 meter length connected at one end with 15 A three pin socket and other end connected permanently to the switch board of locker room for air conditioners	Set	1	
36	Supplying and laying of 2 pair 0.5mm dia telephone cable of tinned copper conductor in PVC conduit of suitable size from crone to each telephone socket.	RM	400	
37	Supply, installation, testing and commissioning of 20 pair krone connector in a suitable box as required and directed.	No.s	1	
38	RJ – 11 telephone sockets with suitable mounting box of modular type, including all inter connections as required and directed.	no.s	15	
39	Supply, installation, testing and commissioning of 20 pair 0.5 sq.mm tinned copper conductor in PVC conduit from krone to MDF / EPABX	RM	40	
40	Earth Stations: Supply, installing and commissioning of earth station including digging and refilling back the pit with black soil and with 3mm x 600mm X 600 mm size copper plate duly tinned through out the surface of the plate, placed at least 1.5Mtr,below the ground level with 25 X 3 flat Cu strip fixed to the plate and providing 40mm,2mtr,long GI pipe with reducer and funnel at top for watering pipe. As per IS 3043-1987 or latest version. The price should be inclusive of preparation of brick masanary chamber, with covering place etc.	Set	1	
41	supplying and laying earth continuity wire of 8 SWG Cu insulated wire in 20 mm dia PVC conduit on the wall from earth plate to starting point of the line earth connector.	RM	100	
42	Providing standard GI pipe earth station, with 100 mm dia 2500 mm long G I Pipe including excavation, construction of brick masonry chamber providing meshed funnel, electrode, watering pipe, charcoal and salt fill, CI cover completely as per IS 3043-1987 or latest revision. The rates to be inclusive of supply and laying of 8 SWG GI wire in 20 mm dia pvc conduit from earth pit to DB	Set	1	
43	Supply, installation, testing and commissioning of Recess mounted lumanaire of 2' X 2' flat type modular 36W LED light fixture complete with electronic driver, wiring, heat sink, opal acrylic diffuser etc. suitable for gyp board or metric false ceiling. The fixture shall be provided with atleast three nos. 20mm dia knock out holes on the top side for fixing down rods and wiring purpose.	Nos.	28	
44	Supply, installation, testing and commissioning of Recessed decorative LED down lighter of 15W complete with electronic driver, wiring, heat sink, opal acrylic diffuser etc. suitable for gyp board or metric false ceillint.	No.s	38	

45	Supply, installation, testing and commissioning of 24 W LED batten suitable for indoor application.	No.s	25	
46	Supply, installation, testing and commissioning of Supply, Installation, testing and commissioning of holder type 7 W LED lamps complete including connections as required. (Make Philips / Bajaj)	No.s	5	
47	Supply, installation, testing and commissioning of Exhaust fan 300 mm Crompton / Bajaj / Usha / Havell's make	No.s	4	
48	Supply, installation, testing and commissioning of Ceiling fan 1200 mm, Crompton / Bajaj / Usha / Havell's make	No.s	10	
49	Supply, installation, testing and commissioning of Wall bracket fan 400 mm Crompton/Bajaj/Usha/Havell's make Note: Wall bracket fans should be with metal blades and metal body.	No.s	15	
51	Supply, installation, testing and commissioning of LED indicator lamps (R, Y, B) with 3 no.s lamp holders and 3 nos. 5 A swtches on a suitable board and wiring with 1.1 kV grade 3 X 1.5 sq.mm copper flexible wire in PVC pipe tapping power from EB cut outs.	Set	1	
52	Preparation of as built layout of electrical Single line diagram and layout in autocad and submission of two sets of copies to branch and concerned engineers	Job	1	

NOTE: Estimated costs are exclusive of GST.

