

SCHEDULE OF QUANTITIES					
ELECTRICAL INSTALLATION WORKS					
AT NEW PREMISES OF REGIONAL BUSINESS OFFICE, ANAKAPALLI					
S. No.	Description	UOM	Qty.	Rate (Rs.)	Amount (Rs.)
	MAINS				
1	Supply and installation of 250 Amps, 4P MCCB complies with IEC 60947-2 with 2mm sheet steel enclosure powder coat painted. The MCCB should have adjustable overload setting With load/line interchangeability with thermo magnetic /static release. (b/w Busbar & MCOS)	No.s	1		
	BUSBAR CHAMBERS				
2	Supply, installation, testing & commissioning of 415 Volts, 250 Amps rated 4 pole compact size busbar Chamber made of 16 SWG (2 mm) sheet steel duly powder coated with anti rustic paint with openable front cover with rubber gasket and RYB LED indicators. The chamber contains with 4 No's electrolyte copper bus bars with minimum 32 mm clearance between each of them duly supported in robust manneron porcelain insulators and all other accessories as required. (Compatible for one incomer, four outgoing cables)	No.s	1		
	MAIN CHANGE OVER SWITCH				
3	Supply and installation of 100 Amps, 4P ON LOAD Change Over Switch with suitable metallic enclosure with hinged door cable entry box and powder coat painted and with 8 nos. LED indicators (having CT coil to glow & show V & I readings) & 8 nos. of 2A MCBs for the indication of EB or DG Set supply separately (3-Phases each) with neat marking.	Set	1		
	APFC PANEL				
4	Wall mounted type Portable Panel :Supply & installation of Automatic Power Factor Control Panel (APFC Panel) with capacity 38 KVAR (15+10+5+3+3+2 KVAR Capacitors) housed in powder coated 16 SWG CRCA Sheet with 4 LED Indicators in incomer (R, B, Y, Black/White having CT coil to glow & show V & I readings) for incomer power supply + stage APFC relay (Stages having one more than the no. of capacitors) + required contactors + control MCBs + individual push buttons & indicators (Green/Red) for ON & OFF Operation (Push buttons with indicators are preferable) + CT of 100-50/5A Ratio Auto / Manual Switches for each capacitor individually + Ammeter (0-50A) & Volt Meter (0-600V) with Phase Selector Switches and Incomer MCCB, 25KA with adequate rating (min 100 Amps).	No.s	1		
	ESSENTIAL DB				
5	Supply ,installation ,testing and commissioning of VTPN DB – IP 43-IK 09 - approved make) comprising of Incomer: 100 Amps 4P MCCB Outgoing: 1 No.s 40 Amps TP MCB (for UPS db), 2 No.s 63 Amps TP MCB (for Gnd floor PDB & LDB) 2 No.s 32 Amps SP MCB (for first floor LDB, PDB) 1 No.s 16-32 Amps SP MCB (for glow sign, outside light) 1 No.s 40 Amps TP MCB (for 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		
	AC DB				
6	Supply ,installation ,testing and commissioning of double door VTPN DB – IP 43 - IK 09 of approved make comprising of rated bus bar and Incomer: 100 Amps 4P MCCB & 4P 30ma ELCB Outgoing: 7 No. 32 Amps TP MCBs (for Cassette AC machines), 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		
	POWER & LIGHTING DB				
7	Supply, installation, testing and commissioning of 8 way ETPN DB (PPI model) with Incomer: 63 Amps 4P MCB Outgoing: 3 X 1 No.s 2P 32 Amps 30 ma ELCB for each phase 3 x 6 No.s 10-16 Amps SP MCBs to individual Switch Board circuits, BM, CO Ac's, etc as per Banks requirement	No.s	2		

	UPS DISTRIBUTION DB				
8	Supply, installation, testing and commissioning of 12 way SPN DB with Incomer: 40 Amps 2P 30ma ELCB Outgoing: 10 No.s 10-16 Amps SP MCBs to individual Switch Board circuits (UPS DB)	No.s	2		
9	Supply, installation, testing and commissioning of 8 way SPN DB with Incomer: 40 Amps 2P 30ma ELCB Outgoing: 5 No.s 10-16 Amps SP MCBs 1 No.s 25-32 Amps SP MCBs to individual Switch Board circuits (UPS DB, first floor LDB, PDB)	No.s	3		
10	Supply, installation, testing and commissioning of 6 way SPN DB with Incomer: 32 Amps 2P MCB Outgoing: 4 No.s 10-16 Amps SP MCBs to individual Switch Board circuits (Conference Room UPS DB)	No.s	1		
	CABLE LAYING AND TERMINATIONS :				
11	Supply & Laying of following 1100V grade armored cable having sector / circular shaped aluminum conductor XLPE insulated cores, laid up, PVC tape wrapped inner sheathed, GI strip / wire armored and overall extruded PVC sheathed conforming to IS: 7098, laid along with 2 Runs of 8SWG GI Wire on wall or ceiling using GI clamps and spacers as per route shown at site and further as directed by Bank / Architect.				
a	3.5 x 95 sq.mm AYFY Cable	Mtr.	0		
b	3.5 x 70 sq.mm AYFY Cable	Mtr.	45		
c	3.5 x 50 sq.mm AYFY Cable	Mtr.	0		
d	4 x 35 sq.mm AYFY Cable	Mtr.	0		
e	4 x 25 sq.mm AYFY Cable	Mtr.	75		
f	4 x 16 sq.mm AYFY Cable	Mtr.	0		
12	End termination of the following size of cables using flange type cable glands and heavy duty tinned aluminium crimping type cable sockets including gland earthing.				
a	3.5 x 95 sq.mm AYFY Cable	Nos.	0		
b	3.5 x 70 sq.mm AYFY Cable	Nos.	4		
c	3.5 x 50 sq.mm AYFY Cable	Nos.	0		
d	4 x 35 sq.mm AYFY Cable	Nos.	0		
e	4 x 25 sq.mm AYFY Cable	Nos.	8		
f	4 x 16 sq.mm AYFY Cable	Nos.	0		
	Other MCB / Isolator DBs :				
	AC POINTS				
13	Supply, installation, testing and commissioning of 32A industrial plug socket in metal clad with 32A DP MCB	No.s	1		
14	Supply, installation, testing and commissioning of 20A industrial plug socket in metal clad with 20A DP MCB	No.s	0		
	4P MCB :				
15	Supply and Installation of 32 A 4P MCB in suitable metallic enclosure	Set	7		
	2P MCB :				
16	Supply & fixing of 40 Amps 2P MCB in suitable metallic box (for UPS Input & Output)	Nos.	2		
17	Supply & fixing of 3 No's 32 Amps 2P MCB's in suitable double door DB enclosure in suitable metallic box (for UPS Output Phase wise distribution) immediately after UPS o/p MCB	Nos.	1		
	2P COS:				
18	Supply and Installation of 40 A DP Changeover switch MCB type in suitable metallic enclosure (UPS outgoing)	Set	0		
	WIRING				
	Circuit / Sub circuit Wiring :				
	Supply and wiring wall / floor etc. / recessed / surface as per colour code with the following size PVC Insulated copper wire along with given earth wire for phase neutral and earth conductor with standard colour coding, through ISI marked rigid PVC conduit.				
19	3 core x 6 sq.mm PVC Copper wire in 2 mm thk, 20 mm dia conduit (for Essential DB to First floor LDB Essential DB to First floor PDB Gnd floor DB to First floor UPS DB)	Mtr.	72		
20	4 core x 6 sq.mm PVC Copper wire in 2 mm thk, 25 mm dia conduit (for UPS o/p to UPS DB)	Mtr.	21		

21	5 core x 6 sq.mm PVC Copper wire in 2 mm thk, 25 mm dia conduit (for Essential DB to LDB Essential DB to PDB for UPS o/p to UPS DB)	Mtr.	81		
DESK/ WORK STATION WIRING					
22	Wiring in PVC conduit of IS specification of proper size with 3 nos 2.5 sq.mm single core PVC insulated stranded copper wire 1.1KV grade and with all material supply installation and commissioning complete from UPS DB/ LDB(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. UPS Primary point for SWC & branch Manager table: 2 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.	Set	17		
23	UPS Secondary point (Looping from above primary point) for SWC & branch Manager table: 2 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.	Set	16		
24	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 UPS DB/ LDB (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. Raw power point for SWC and other work stations: 3 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	18		
25	Raw Power Secondary point (Looping from above primary point) for SWC & branch Manager table: 3 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.	Set	16		
26	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 UPS DB/ LDB(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. 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	9		
GENERAL WIRING					

	Wiring for light/ fan/ exhaust fan points using 3 X 1.5 sqmm 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.				
27	2 no. of lights controlled by one switch	Set	33.00		
28	1 no. of lights by one switch.	Set	21.00		
29	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	12.00		
30	Ceiling fans with electronic regulators	Set	6.00		
31	6 A light plug controlled by 6 A switch on the same switch board	Set	10.00		
32	Call bell point for Branch Manager chamber along with the supply of call bell	Set	1.00		
33	6A light plug socket with 6A switch wiring including all accessories, as per the branch requirement in the banking hall	Set	0		
34	Supply, installation, testing and commissioning of Security lighting with designer LED street light with pressure die cast housing of 75 Watt capacity.	No.s	0		
35	Supply, installation, testing and commissioning of LED indicator lamps (R, Y, B) with 3 no.s lamp holders and 3 nos. 5 A switches 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		
36	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	1		
37	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	0		
38	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 safe room / locker room	Set	0		
	POPUP BOX				
39	Supply, installation, testing & commissioning of Metal finish pop-up box 8 module (4+4) on top of the conference room table with all other connections required.	Nos.	5		
	AC Point (1-Ph) :				
40	Supply all materials and wiring through wall floor etc, concealed as per colour code with 3 x 4.0 sq mm P V C insulated stranded copper wire in 2mm thk PVC pipe. (DB to AC point)	Mtrs	18		
	AC Point (3-Ph) :				
41	Supply all materials and wiring through wall floor etc, concealed as per colour code with 5 x 2.5 sq mm P V C insulated stranded copper wire in 2mm thk PVC pipe.(DB to AC outdoor unit)	Mtrs	120		
	TELEPHONE & DATA				
42	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 and RJ – 11 telephone sockets with suitable mounting box of modular type, including all inter connections as required and directed.	No.s	33		
43	Supply, installation, testing and commissioning of 30 pair krone connector in a suitable box as required and directed.	No.s	1		
44	Supply, installation, testing and commissioning of 30 pair 0.5 sq.mm tinned copper conductor in PVC conduit from krone to MDF / EPABX	RM	10		
45	Supply and laying of ISI marked 25mm dia medium grade PVC conduit for data cabling with fish wire from	RM	180		
	EARTHING				
46	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	2		

47	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	45		
48	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, GI 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	2		
49	Supplying and laying earth continuity wire of 8 SWG GI insulated wire in 20 mm dia PVC conduit on the wall from earth pit to starting point of the line earth connector.	RM	60		
50	Supply & Installation of 25x3 mm tinned Copper Earth Bench of 30 cm long for termination of main earth conductors and other interconnections.	Nos.	2		
LIGHTS & FIXTURES					
51	Supply, installation, testing and commissioning of Recess mounted luminaire 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.	42		
52	Supply, installation, testing and commissioning of Recess mounted luminaire of 1' X 1' flat type modular 18W 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.	9		
53	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 ceiling.	No.s	12		
54	Supply, installation, testing and commissioning of 18 W - 22W LED batten (4 ft. length) along with all other connections & accessories required.	No.s	10		
55	Supply, installation, testing and commissioning of 9W - 10W LED batten (2 ft) suitable for indoor application.	No.s	6		
56	Supply, installation, testing and commissioning of 15-18W True ceiling mounted Down light (LED) fittings/ Portico light fittings.	No.s	6		
57	Supply, installation, testing and commissioning of 12W Bulk head LED light fittings suitable for outdoor application.	No.s	3		
58	Supply, installation, testing and commissioning of Exhaust fan 300 mm Crompton / Bajaj /Usha / Havell's make	No.s	8		
59	Supply, installation, testing and commissioning of Ceiling fan 1200 mm, Crompton / Bajaj /Usha/ Havell's make	No.s	6		
60	Supply, installation, testing and commissioning of Metal Wall bracket fan 400 mm Crompton/Bajaj/Usha/Havell's make	No.s	4		
61	Supply, installation, testing and commissioning of LED indicator lamps (R, Y, B) with 3 no.s lamp holders (required as per lamps model) and 3 nos. 5 A switches 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		
62	Marking of Panels, DBs, its switch and fuse ratings, cable size, location etc on DBs, for EB (Red), UPS (Blue) distribution boxes, Switch/Socket Boards etc. with radium sticker / stencil with permanent marker / painting only.	Lot	1		
63	Charges for preparation of single line diagram of the whole electrical installation using AutoCAD, lamination and displaying it inside the UPS room.	Lot	1		
64	Supply and providing of 1m x 2m size (Approx.) x 3mm thick electrical grade rubber mat in Electrical / UPS Room.	Nos.	1		
65	Shock treatment chart.	Nos.	1		
66	Rubber gloves.	Nos.	1		
Master Control Set up :					
67	Supply, Installation, testing and commissioning of 1 No.s 100 Amps 4P MCB, 1 No's 63 Amps 4P MCB, 1 No's 32 Amps 2P MCB within a single metal enclosure/ DB with openable door, fixed/ recessed in the wall with all other terminations required etc.	Set	1		

+ GST as applicable