

**SCHEDULE OF QUANTITY**  
**ELECTRICAL WORKS – PM PALEM BRANCH, VISAKHAPATNAM**

SL NO.	DESCRIPTION OF ITEM / WORK	UNIT	Qty	RATE	AMOUNT
<b>PART - A : ELECTRICAL WORKS</b>					
1	<b>Energy Meter Cubicle :</b>	Set	0		
2	<b>Emergency Off Box (Red Box):</b>	Nos.	0		
3	<b>CABLE LAYING AND TERMINATIONS :</b>				
a	<b>Cable :</b>				
	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.				
i	3.5x 75 sq.mm AYFY Cable (Main incomer)	Mtr.	50		
ii	3.5x 50 sq.mm AYFY Cable (Main incomer)	Mtr.	0		
iii	4 x 35 sq.mm AYFY Cable (for DG Set)	Mtr.	20		
iv	4 x 25 sq.mm AYFY Cable (for AC DB + ATM)	Mtr.	40		
v	4x16 sq.mm AYFY Cable (for ATM)	Mtr.	0		
b	<b>Cable end Terminations :</b>				
	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.				
i	i) 3.5x75 sq.mm AYFY	Nos.	2		
ii	ii) 3.5x50 sq.mm AYFY	Nos.	0		
iii	iii) 4 x 35 sq.mm AYFY	Nos.	2		
iv	iv) 4 x 25 sq.mm AYFY	Nos.	4		
v	v) 4x16 sq.mm AYFY	Nos.	0		
4	<b>COS :</b>				
a	<b>Main COS (Manual) :</b>				
i	Supply and installation of 125A, 4P ON LOAD Change Over Switch with suitable metallic enclosure made out of 16 SWG CRCA sheet with cable entry box and powder coat painted and with 6 nos. LED indicators & 6 nos. of 2A MCBs for the indication of EB or DG supply.	Set	0		
ii	Supply and installation of 63A, 4P ON LOAD Change Over Switch with suitable metallic enclosure with cable entry box and powder coat painted and with 6 nos. LED indicators & 6 nos. of 2A MCBs for the indication of KSEB or DG Set supply separately (3-Phases each) with neat marking.	Set	0		
b	<b>UPS O/P COS :</b>				
ii	Supply and installation of 2 x 32A, 2P ON LOAD ROTARY / MCCB Type Change Over Switch in suitable metallic enclosure for with 4 nos. LED indicators & neat marking.	Set	1		
5	<b>Main Switch Board :</b>				
a	<b>Panel Board</b>				
	Supply, installation, Testing and commissioning of main LT panel, floor mounted front operated totally enclosed vermin proof, indoor non-drawout-cubicle type power panel fabricated out of 2mm thk CRCA.....				
	EB :125A, Incomer : 25kA, TP 1 Nos. MCCB	Set	0		
b	<b>Vertical Distribution Box (VDB):-</b>				
	Supply, Installation, testing and commissioning of <b>Double door 8 Way VTPN MCCB Vertical DB</b> consisting of the following accessories with complete interconnections.				
	Incomer : 125A,25kA, TP 1 Nos. MCCB	Set	1		
	Out 63A, TP MCB 1 Nos.				

		goings :				
		32A, TP MCB	4	Nos.		
		32A, SP MCB	3	Nos.		
		20A, SP MCB	3	Nos.		
		125A Copper bus bar for 3 phases				
		* Qty. / Rating of MCBs to be adjusted according to actual requirement				
6	Distribution Boxes :-					
	a	LDB / RPDB :-				
	i	Supply, Installation, testing and commissioning of Double door dust and vermin proof 6 way ETPN MCB DB consisting of the following (with complete interconnections)				
		Incomer :	43A, 4P 30mA ELCB + MCB	1	Nos.	Set 0
	b	AC DB / RPDB :-				
	i	Supply, Installation, testing and commissioning of Double door dust and vermin proof 8 way VTPN MCB DB consisting of the following (with complete interconnections)				
		Incomer :	63A, 4P 30mA ELCB + MCB	1	Nos.	Set 0
	ii	Supply, Installation, testing and commissioning of Double door dust and vermin proof 4 way VTPN MCB DB consisting of the following (with complete interconnections)				
		Incomer :	63A, 4P 30mA ELCB + MCB	1	Nos.	Set 0
	iii	Supply, Installation, testing and commissioning of Double door dust and vermin proof 4 way VTPN MCB DB consisting of the following (with complete interconnections)				
		Incomer :	63A, 4P 30mA ELCB + MCB	1	Nos.	Set 0
	c	UPS INPUT Side :-				
	i	Supply, Installation, testing and commissioning of Double door dust and vermin proof 4 way VTPN MCB DB consisting of the following (with complete interconnections) for i/p to UPS & ACs etc.				
		Incomer :	63A, 4P 30mA ELCB + MCB	1	Nos.	Set 0
	ii	Supply and Installation of Single Door 4Way with 1x32A 4P MCB suitable metallic enclosure (for 3-Ph UPS)				Nos. 0
	iii	Supply & fixing of Single Door 2 way DB with 32 A DP MCB in suitable mettalic box (for 1-Ph UPS)				Nos. 4
	d	UPS Output Side :-				
	i	Supply, Installation, testing and commissioning of Double door dust and vermin proof 12 way SPN MCB DB consisting of the following (with complete interconnections.				
		Incomer :	40A 2P MCB	1	Nos.	set 0
	ii	Supply, Installation, testing and commissioning of Double door dust and vermin proof 8 way SPN MCB DB consisting of the following (with complete interconnections .				
		Incomer :	40A 2P MCB	1	Nos.	set 2
7	Other MCB / Isolator DBs :					
	a	8 way (4P ELCB + MCBs):-				
	i	Supply and Installation of Single Door 8 Way SPN MCB DB with 30mA, 32A 4P MCB + 4P ELCB suitable metallic enclosure				
		for ATM incomer (in e-lobby room)			Set	0
		for local control of the 3 phase ACs in Banking Hall				
	b	4 way (DP ELCB + MCBs):-				
	i	Supply and Installation of Single Door 4 Way SPN MCB DB with 30mA 32A DP ELCB (incomer) + 2x20A SP MCB suitable metallic enclosure				Set 0
	b	4 way :-				
	i	Supply and Installation of Single Door 4Way with 1x32A 4P MCB suitable metallic enclosure for local control of the 3 phase ACs in Banking Hall				Nos. 2
	c	2 way :-				

	i	Supply & fixing of <b>Single Door 2 way DB with 32 A DP MCB</b> in suitable mettalic box	Nos.	0		
8	<b>Plug &amp; Sockets :</b>					
Supply and fixing of following Modular type switches/ plugs / sockets mounted on suitable box.						
a	3 pin socket - <b>25 A Modular type socket &amp; Top</b> for fixing 1-Ph Acs / Stabilizers.		Nos.	0		
b	3 pin socket / Connector Box - <b>25A Modular type socket</b> with suitable metallic/PVC enclosure <b>controlled by a separately located 25A Modular type DP Switch for 1-Ph air conditioners</b>		Nos.	3		
c	3 Pin <b>UPS</b> Sockets - 3 no. x 5A & 1 no. x 5/15 A with seperately controlled <b>15 A indicator switch (for counters only).</b>		Nos.	0		
d	3 Pin <b>UPS</b> Sockets - 1 no. x 5A & 1 no. x 5/15 A with seperately controlled <b>15 A indicator switch (for officer Tables, where Raw power is provided).</b>		Nos.	5		
e	3 Pin <b>EB</b> Socket - 2 no. x 5A controlled by 2 no. x 5 A switches.		Nos.	0		
f	3 Pin Sockets - 1 no. x 5/15A controlled by 1 no. x 15 A switch with indicator <b>in different locations.</b>		Nos.	3		
g	3 Pin Sockets - 1 no. x 5/15A.		Nos.	0		
h	3 Pin Sockets - 1 no. x 5A controlled by 1 no. of 5 A Switch in separate locations.		Nos.	8		
i	3 Pin Sockets - 1 no. x 5A controlled by 1 no. x 5 A switch (to add to common switch board)		Nos.	5		
9	<b>Lights, Fixtures &amp; Fans etc. :</b>					
a	Supply and Installation of recessed type <b>LED Square (2x2) Light</b> fitting with suitable frame if any ( $\geq 2900$ Lu, $\leq 39W$ , $\geq 6000K$ , Ex.:Model-RC140B).		Nos.	7		
b	Supply and Installation of recessed type <b>LED Round Light</b> fitting with suitable frame if any ( $\geq 1300$ Lu, $\leq 15W$ , $\geq 6000K$ , Ex : Model-DN153)		Nos.	0		
c	Supply and installation of <b>4Ft LED Tube Light</b> fitting ( $\geq 1600$ Lu, $\geq 18W$ , $\geq 6000K$ , ex. : Model:BN012C)		Nos.	11		
d	Supply and installation of <b>2Ft LED Tube Light</b> fitting ( $\geq 400$ Lu, $\leq 6W$ , $\geq 6000K$ , ex. : Model : )		Nos.	3		
e	Supply and installation of <b>BULK HEAD LIGHT</b> fitting ( $\geq 600$ Lu, $\leq 10W$ , $\geq 6000K$ , ex. : Model:Philips WT202W)		Nos.	6		
f	Supply and installation of <b>9" size medium duty exhaust fan.</b> (Toilets) Crompton Greaves (Necessary wall cutting & finishing to be done by Contractor)		Nos.	1		
g	Supply and installation of <b>12" size medium duty exhaust fan.</b> (UPS Room) Crompton Greaves (Necessary wall cutting & finishing to be done by Contractor)		Nos.	1		
h	i	Supply amd installation of <b>1200 mm sweep ceiling fan.</b> (Crompton Greaves High Speed)	Nos.	3		
	ii	Supply and Installation of step type modular <b>electronic regulator (Only in dining Room).</b>	Nos.	5		
	iii	Supply and providing <b>fan hook</b> on ceiling.	Nos.	7		
	iv	Supply and providing fan rod with painting (up to 1m length - if required)	Nos.	7		
i	Supply and Installation of <b>400 mm sweep wall fan.</b> (Crompton Greaves / Usha)		Nos.	0		
j	Supply & installation of wireless calling bell (Battery operated)		Nos.	1		
k	<b>Phase Indicator Box</b> containing 3 nos. indicators with 5A control switches & connected to RYB phases of KSEB to be fixed in banking hall area which is visible for all the staff.		Nos.	1		
10	<b>Point Wiring for Light, Fan, Plug &amp; Sockets etc. :</b>			0		
a	<b>Light Point</b>					

	i	Supply all materials and wiring through wall floor etc, concealed as per colour code with 3x1.5 sq mm P V C insulated stranded copper wire.	Nos.	55		
	ii	Loop to the above with 3X1.0 sq.mm PVC wire	Nos.	10		
<b>b</b>	<b>Wall Fan Point</b>					
	i	Supply all materials and wiring through wall floor etc, concealed as per colour code with 3x1.0 sq mm P V C insulated stranded copper wire, with suitable 2 / 3 pin, 5 A Socket & switch.	Nos.	15		
<b>c</b>	<b>UPS / Raw power Point</b>					
	i	Supply all materials and wiring through wall floor etc, concealed as per colour code with 3x2.5 sq mm P V C insulated stranded copper wire.	Nos.	11		
	ii	Loop to the above with 3X1.5 sq.mm PVC wire	Nos.	10		
<b>d</b>	<b>AC Point (1-Ph) :</b>					
	i	Supply all materials and wiring through wall floor etc, concealed as per colour code with 3x4 sq mm P V C insulated stranded copper wire.	Nos.	3		
<b>11</b>	<b>Circuit / Sub circuit Wiring :</b>					
	<b>a</b>	Supply and wiring wall / floor etc. / recessed / surface as per colour code with <b>the following size PVC Insulated copper wire</b> along with <b>given earth wire</b> for phase neutral and earth conductor with standard colour coding, <b>through ISI marked rigid PVC conduit.</b>				
	i	2 x 1.0 sq.mm PVC Copper wire in 20 mm dia conduit for emergency Stop Box Connection etc.	Mtr.	0		
	ii	3 x 1.5 sq.mm PVC Copper wire in 20 mm dia conduit.	Mtr.	0		
	iii	3 x 2.5 sq.mm PVC Copper wire in 20 mm dia conduit.	Mtr.	0		
	iv	5 x 2.5 sq.mm PVC Copper wire in 20 mm dia conduit - for 3-Ph circuits like 3-Ph AC / UPS etc.	Mtr.	80		
	v	3 x 4 sq.mm PVC Copper wire in 20 mm dia conduit - for Sign Boards etc.	Mtr.	30		
	vi	3 core - 4 sq.mm PVC Copper Cable - for UPS O/P to DB in Elect Room.	Mtr.	10		
	vii	3 x 6 sq.mm PVC Copper wire in 20 mm dia conduit - for UPS Input circuit.	Mtr.	10		
<b>12</b>	<b>Earthing &amp; Earth Conductors :</b>			0		
	<b>a</b>	Providing Plate earth Pits as per IS 3043 with 600x600x3.0 mm GI/CI earth plate, 20 mm GI pipe, filled with sufficient charcoal & others along with construction of inspection chamber & other necessary works.	Nos.	2		
	<b>b</b>	Same as above but <b>COPPER PLATE EARTHING</b> AS PER STANDARD SPECIFICATIONS.	Nos.	2		
	<b>c</b>	Supply and laying of the following size of bare copper conductor along with cables, for interconnections between panels, DBs, COS, DG Set & Earth Pits etc.				
	i	1 X 8 SWG GI Wire for Earthing.	Mtr.	50		
	ii	1 X 10 SWG bare copper conductor	Mtr.	150		
	iii	Green sleeved 1 X 10 SWG copper conductor	Mtr.	10		
	<b>d</b>	20mm PVC conduit (to be used for the conductors which expose to weather)	Mtr.	20		
	<b>e</b>	Supply & Installation of 25x3 mm tinned Copper Earth Bench of 30 cm long for termination of main earth conductors and other interconnections. (1 no. each for every earth pit + other necessary areas if required. All should be accommodated in Electrical	Nos.	3		
<b>13</b>	<b>Timers</b>					
	<b>a</b>	L&T Make Timer - 5A - with setting of ON from 6.00 PM to 6.00 AM (for Security Lights / Front Shutter Light) with suitable contactor.	Nos.	1		
	<b>b</b>	L&T Make Timer - 15A - with setting of ON from 6.00 PM to 6.00 AM (for Server Acs) with suitable contactor.	Nos.	1		
<b>14</b>	<b>Others :</b>					

	<b>a</b>	Marking of Panels, DBs, its switch and fuse ratings, cable size, location etc (Neat identification from top to extreme load end of both light and power distribution including KSEB / UPS plug sockets and generator switch boards) using white / black paint a	Lot	1		
	<b>b</b>	Charges for preparation of single line diagram of the whole electrical installation using AutoCAD, lamination and displaying it inside the UPS room.	Lot	1		
	<b>c</b>	Removal of existing old wiring / electrical installations etc. and providing temporary arrangement for working of the branch during the works.	Lot	0		
	<b>d</b>	Supply and providing of (i)6mm thick electrical grade rubber mat in Electrical / UPS Room	Nos.	1		
	<b>e</b>	Shock treatment chart	Nos.	1		
	<b>f</b>	Rubber gloves	Nos.	1		
<b>TOTAL AMOUNT (A) :</b>						
<b>PART - B TELEPHONE</b>						
<b>1</b>	Supply and wiring using following telephone cable in 20mm PVC conduit from the CRONE Box to the individual points. Number of cables in one conduit limited to 5.					
	<b>a</b>	Supply and wiring using following 2 Pair telephone cable in 20mm PVC conduit.	Mtr.	250		
	<b>b</b>	Supply and wiring using following 5 Pair telephone cable in 20mm PVC conduit from outside CRONE to inside CRONE Box.	Mtr.	20		
<b>2</b>	Supply and fixing of RJ 11 type modular telephone socket on suitable PVC / metal boxes.					
	<b>a</b>	Telephone socket - single modular type	Nos.	5		
	<b>b</b>	Telephone socket - double (modular type)	Nos.	1		
<b>3</b>	Supply & installation of KRONE telephone junction box of 20 pair Connector in 50 pair Box.					
			Nos.	1		
<b>TOTAL AMOUNT (B) :</b>						
<b>PART - C : RE-ARRANGEMENT OF EXISTING MATERIAL (already removed) :</b>						
<b>1</b>	Cleaning & Re-installation & commissioning of following items with all necessary wiring & interconnections :					
	<b>a</b>	4 way VTPN DB	Nos.	2		
	<b>b</b>	6 way ETPN DB	Nos.	1		
	<b>c</b>	32 A DP MCBs & mettalic enclosure	Nos.	3		
	<b>d</b>	Main COS - 100 A	Nos.	1		
	<b>e</b>	UPS Socket boards (4x6A 3 pin) with seperately controlled 6A switch	Nos.	10		
	<b>f</b>	Raw Power Socket boards (2x6A 3 pin) with seperately controlled 6A switch	Nos.	9		
	<b>g</b>	RJ11 - Telephone sockets	Nos.	5		
	<b>h</b>	Square (2x2) LED Fittings with proper support from ceiling	Nos.	7		
	<b>i</b>	18 W down lights	Nos.	18		
	<b>j</b>	Exhaust Fans - 9 " in toilets with proper cutting of wall and finishing with cement plastering	Nos.	2		
	<b>k</b>	Wall mounted Fans	Nos.	12		
	<b>l</b>	Ceiling Fans & their regulators	Nos.	6		
	<b>m</b>	Other miscellaneous works	Lot	1		
<b>TOTAL AMOUNT (C) :</b>						
<b>GRAND TOTAL (D = A+B+C):</b>						

GRAND TOTAL IN WORDS : \_\_\_\_\_