

FINANCIAL BID

STATE BANK OF INDIA
ADMINISTRATIVE OFFICE : HUBBALLI
RASMECC DHARWAD , KARNATAKA.

ELECTRICAL WORKS : SCHEDULE OF ITEMS(BOQ)

PART A

SL No	DESCRIPTION OF WORK	QTY	UNIT	SUPPLY		ERECTION															
				RATE	AMOUNT	RATE	AMOUNT														
SPECIAL INSTRUCTION TO TENDERERS : This is an item rate tender. The Amount quoted shall be firm and shall include all costs, allowances, taxes, levies, Works Contract tax, sales tax. The rates quoted for each and every item should be self sustaining and reasonable. If unreasonably very low or very high rates are quoted for any item of this tender schedule, such tenders will be summarily rejected.																					
1	MAIN PANEL (VDB) : Supply, Installation, testing and commissioning of Double door 12-Way VTPN MCCB Vertical DB consisting of the following. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>100A, 10 kA 4P MCCB as Incomer.</td> <td style="text-align: center;">Ms</td> </tr> <tr> <td>40/63A,3 Pole MCB (C-Series) -3Nos.(To PDB,3 ph UPS)</td> <td style="text-align: center;">9</td> </tr> <tr> <td>32A,3 Pole MCB (C-Series) - 4 Nos.(To LDB , 3ph AC)</td> <td style="text-align: center;">12</td> </tr> <tr> <td>20A, Single Pole MCB (C-Series) – 4Nos.(To AC Units)</td> <td style="text-align: center;">2</td> </tr> <tr> <td>16A Single Pole MCB (C-Series) –3Nos.(To NB,AC)</td> <td style="text-align: center;">1</td> </tr> <tr> <td>250A Copper busbar for 3 phases</td> <td></td> </tr> <tr> <td>Complete with all inter connections.</td> <td style="text-align: center;">24</td> </tr> </table>	100A, 10 kA 4P MCCB as Incomer.	Ms	40/63A,3 Pole MCB (C-Series) -3Nos.(To PDB,3 ph UPS)	9	32A,3 Pole MCB (C-Series) - 4 Nos.(To LDB , 3ph AC)	12	20A, Single Pole MCB (C-Series) – 4Nos.(To AC Units)	2	16A Single Pole MCB (C-Series) –3Nos.(To NB,AC)	1	250A Copper busbar for 3 phases		Complete with all inter connections.	24	1	Set				
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2	PDB : Supply, Installation, testing and commissioning of Double door 4 way-(8+12) TPN MCB DB consisting of the following. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>63A, 100 mA RCCB + 40/63A MCB as Incomer - 1 No.</td> <td></td> </tr> <tr> <td>10/16A 'C' Series MCB as out going - 12 Nos.</td> <td></td> </tr> <tr> <td>Complete with all inter connections.</td> <td></td> </tr> <tr> <td>80A Copper BUS BAR for 3 phases</td> <td></td> </tr> </table>	63A, 100 mA RCCB + 40/63A MCB as Incomer - 1 No.		10/16A 'C' Series MCB as out going - 12 Nos.		Complete with all inter connections.		80A Copper BUS BAR for 3 phases		1	Set										
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3	LDB : Supply, Installation, testing and commissioning of Double door 4 way TPN MCB DB (8+18 way) consisting of the following.(Incomer- MCB & RCCB shall be separate) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>40A, 30mA ELCB+32A MCB as Incomer- 1 Nos</td> <td></td> </tr> <tr> <td>6/10A 'B' Series MCB as out going - 18Nos.</td> <td></td> </tr> <tr> <td>Complete with all inter connections.</td> <td></td> </tr> </table>	40A, 30mA ELCB+32A MCB as Incomer- 1 Nos		6/10A 'B' Series MCB as out going - 18Nos.		Complete with all inter connections.		1	Set												
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4	UPS IN PUT DB Supply and installation of 40 A 4P MCB in suitable metallic enclosure for UPS Input.	3	Nos.																		
5	UPS OUT PUT DB Supply and installation of 40A DP MCB in suitable metallic enclosure for UPS Input.	3	Nos.																		

6	UPS CHANGE OVER PANEL Supply erection testing and commissioning of 2 Nos. 40A rotary type change over switch in suitable metal box with 4 Nos. LED indicator for input / output identification. UPS Output change over switch board.	1	Set				
7	COMPUTER DB Supply, erection, testing and commissioning of wall mounted type <i>Double Door</i> dust and vermin proof 8 way SPN MCB DB fixed on wall comprising the following:	2	Set				
	40A, 2 pole MCB - 1 No.						
	6A / 16A MCB – 6 Nos.						
	SPN MCB DB - 8 way						
8	CABLE LAYING AND TERMINATIONS Supply, laying and dressing of the following size of 1.1 KV grade PVC insulated armoured cable with aluminium conductor concealed or clamped on wall/ ceiling / trench / cable tray if necessary.						
	i) 3.5x 25 Sq.mm AYFY (Main Cable)	80	Mtr.				
	ii) 4x10 Sq.mm AYFY (LDB)	25	Mtr.				
9	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) 3.5x25 Sq.mm AYFY	4	No.				
	ii) 4x10 Sq.mm AYFY	2	No.				
10	Supply and providing ISI pipe earthing as per IS 3043 with 2.5m long 40mm dia B class G.I. pipe providing GI clamp at the top of the GI pipe test joint, filling around the GI pipe at the radius of 15cm with homogeneous mixture of charcoal, common salt and river sand up to height of 2.5m from the bottom and the rest of the portion with excavated soil, providing brick work masonries, plastering, fixing cast iron cover of 30x30cm size etc. complete.	2	No.				
11	EARTH CONDUCTORS Supply and laying of the following size of bare copper conductor along with above cables, for interconnection between panels, DBs, change over switches etc. and also for interconnection between earth pits.						
	i) No.10 SWG	100	Mtr.				
12	Supply and laying of 2 X No. 10 SWG copper conductor/ 10sqmm PVC insulated (FRLS type) flexible copper wire through 20mm PVC conduit for UPS earthing.	80	Mtr.				

13	Supply and laying of 1run No.10 SWG copper conductor / 10sqmm PVC insulated (FRLS type) flexible copper wire - through 20mm PVC conduit for D'kraft RACK's lightning protection.	30	Mtr.				
	<u>WIRING FOR LIGHT, FAN, PLUG, SOCKETS ETC</u>						
14	<u>POINT WIRING</u> :Supply and wiring for light/fan/exhaust fan/calling bell/mirror lamp/bulk head light/wall fans etc.with 3 plate ceiling rose and by using 3 X 1.5 sqmm. PVC insulated flexible copper conductor wire(FRLS type) in 20mm dia 1.5mm thick rigid PVC conduit, controlled by 5 Amps modular type switch with provisions for modular type ceiling fan regulator on separately fabricated MS Box. The M. S. box should be earthed properly. One way point						
a.	a.Single light point controlled by 6A switch	20	No.				
b.	b.Two light points controlled by 6A switch	45	No.				
c.	c.Secondary light point connected to the two light point controlled by a switch.	30	No.				
d.	d. ceiling fan point controlled by 1-A switch and stepped electronic regulator along with fan hook	10	No.				
15	Supply and fixing of Modular type 5A 3 pin plug points controlled 5A modular switch mounted on suitable box. (on common switch board)	8	No.				
16	Same as above but for modular type 5A 3 pin plug points with 5A modular type switch in separate location.	15	No.				
17	Same as above but for 2 Nos. modular type 5 A 3 pin plug points with 2nos. 5A modular type switch in separate location. (cash cabin desk, nodes,etc) -RAW power point.	18	No.				
18	Supply and fixing of modular type 6/16A plug socket with 16A modular type switch mounted on suitable Box.(for Mgr cabin, Cash Cabin, Pantry, Water cooler, Air Curtain, etc) .	5	No.				
19	Supply and providing 16 A plug top and 1.5m long 3 core 2.5Sqmm flexible copper cable (FRLS type) for taking incoming supply from 16A socket. (For UPS & EB supply to strong room, line printer and kitchen)	2	No.				
20	<u>CIRCUIT WIRING</u> :Supply and wiring wall / floor etc. / recessed / surface as per colour code with 3 runs of 1.1KV grade 1.5 Sqmm PVC insulated (FRLS type) flexible copper wire for phase neutral and earth conductor with standard colour coding, through ISI marked 20mm dia rigid PVC conduit with all accessories. The rate includes the cost of complete wiring from switch box to switch box.	100	Mtr.				

21	Same as above but with 3 x 2.5 Sq.mm PVC Insulated copper wire(FRLS type) .(for lighting main circuit, , 0.75/1.0Tonne AC, 15A plug points & UPS point wiring)	550	Mtr.				
22	Same as above but with 3 x 4 Sq.mm PVC Insulated copper wire(FRLS type) . (for 1.5/2Tonne AC and UPS O/P COS to Computer DB and for Name Boards if there are multiple Name-boards or extra ordinarily lengthy Name Boards)	65	Mtr.				
23	Same as above but with 4 x 4 Sq.mm + 2 x 2.5sqmm PVC Insulated copper wire(FRLS type) . (for 3-phase ACs)	55	Mtr.				
24	Same as above but with 4 x 6 Sq.mm+ 2 x 4sqmm PVC Insulated copper wire(FRLS type) through rigid conduit on wall and flexible conduit on floor for UPS Input.(4m length x 2 UPS)	30	Mtr.				
25	Supply and Installation of 25A Modular type 3 pin plug socket with suitable metallic box for air conditioners/ air curtain (near AC indoor unit , near Stabilizer)	4	No.				
26	Supply and Installation of 32A Modular type DP switch (2module) with indicator mounted on suitable metallic/PVC box for the local control of air conditioners /air curtain	4	No.				
27	Supply and installation of 20/32A FP MCB in suitable weather proof enclosure for local control of 3ph air conditioners.	4	No.				
28	UPS POWER STATIONS: Supply, install, test and commissioning of computer power stations with 3 Nos. 5A modular type sockets and 1 No. 15A modular type sockets controlled with 1 No. 15A modular type single pole switch with indicator mounted on M.S Box. The boxes should be fixed on wall / partitions (wooden) concealed or open as required at site. Maximum 3 sets per circuit.	25	No.				
29	Same as above but for 2 Nos. modular type 15 A 3 pin plug points with 2 nos. 15A modular type switch in separate location.(for Data Kraft rack / I/O Rack/ Cash cabin)	1	No.				
30	Supply, install, test and commissioning of 16A modular type master switch with indicator in suitable PVC box for the main control of UPS stations in the counters.	25	No.				
31	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 EB / UPS plug sockets and generator switch boards) using white / black paint and stencil. (free hand writing not allowed). Good quality stickers may also be used.	1	LS				

32	Charges for preparation of single line diagram of the whole electrical installation using AutoCAD, lamination and displaying it inside the UPS room.	1	LS				
33	Service charges for liaison work with EB authorities on behalf of bank for getting sanction for additional load, getting order for statutory payments, shifting/replacements of suitable. Energy meter meter if necessary, submission of completion report, obtaining final load sanction from concerned EB and displaying it in the UPS room after lamination. Etc.	1	LS				
34	<u>LIGHT FIXTURES & FANS</u>						
a.	Supply and Installation of recess mounting (gypsum /mineral board ceiling) 1 x 40 watts (35-40W)LED type(5000K, CRI >80) type square luminaries of size 600x600 mm (including fixing frame if any required) The fittings shall be fixed aesthetically on gypsum /mineral board ceiling. (Wipro / CG / Havels)	24	No.				
b.	Supply & installation of recess mounting (gypsum /mineral board ceiling) 1 X~9 Watts LED type round light fitting or equivalent with lamps and white reflector on false ceiling The fittings shall be fixed aesthetically on gypsum /mineral board ceiling .(Wipro / CG / Havels)	32	Nos				
c.	Supply & installation of 1x15W LED recess mounting type down Light fitting with lamps and white reflector on false ceiling..(Wipro / CG / Havels)	12	Nos				
d.	Supply & installation of modular type calling bell	1	Nos				
e.	Supply & Installation/fixing of 1 X ~20W LED type 4' tube light fixture wall /ceiling.	32	Nos				
f.	Supply & Installation of 9" size medium duty exhaust fan. (Toilets) Crompton Greaves – (with double bearing type)	5	Nos				
g	Supply and installation of 12" size medium duty exhaust fan. (UPS Room/ store)–(with double bearing)	1	Nos				
h	Supply & Installation of 400 mm sweep wall fan. Crompton Greaves – (with double bearing)	15	Nos.				
i	Supply & Installation of 1200mm sweep ceiling fan. (Crompton Greaves High Speed) – (with double bearing)	6	No.				
j	Supply and providing fan hook on ceiling.	4	No.				
k	Supply and providing fan rod with painting (upto 1m length) (other than that supplied with fan and if required)	4	Nos.				
l	Supply and providing tinned copper earth bench using 25 x 3 mm copper strip (25 Cm in length)	3	No.				

m	Supply and providing of 6A, 3 pin modular socket on suitable metal box for wall fan. (controlled from common switch box)	15	Nos.				
n	Day timer – GIC / L&T make 24hr Timer switch for Sign board	1	Nos.				
PART - A TOTAL AMOUNT IN FIGURES							
PART - A TOTAL AMOUNT IN WORDS							
PART - B							
	<u>TELEPHONE</u>	QTY	UNIT	SUPPLY		ERECTION	
				RATE	AMOUNT	RATE	AMOUNT
1	Supply and wiring using 2 pair telephone cable (0.5mm ²) in 20mm PVC conduit from the EPABX to the individual points. One separate cable for each point. Number of cables in one conduit limited to 5.						
	2 pair telephone cabling	200	m				
	5 pair telephone cabling (1 run for EPABX)	50	m				
2	Supply and fixing of RJ 11 type modular telephone socket on suitable PVC / metal boxes.						
	.i) Telephone socket - single (modular type)	20	No.				
	.ii) Telephone socket - double (modular type)	2	No.				
3	Supply and installation of KRONE connector telephone junction box of 10 pair.	2	No.				
PART - B SUB TOTAL							
PART - B TOTAL AMOUNT IN WORDS							
PART - C							
	<u>MUSIC SYSTEM</u>	QTY	UNIT	SUPPLY		ERECTION	
				RATE	AMOUNT	RATE	AMOUNT
1	Supply and wiring as per colour code with 2.50Sqmm PVC insulated stranded copper wire 2 runs through ISI grade 20mm conduit for speakers.	120	m				
2	Supply and providing 9W recessed type speakers on ceiling CS 663 T Ahuja make speaker.	8	No.				
PART - C SUB - TOTAL AMOUNT IN FIGURES							
PART - C TOTAL AMOUNT IN FIGURES							

PART - D							
	<u>DATA CABLING</u>	QTY	UNIT	SUPPLY		ERECTION	
				RATE	AMOUNT	RATE	AMOUNT
1	Supply and laying of CAT 6 UTP cable through 25mm dia rigid PVC conduit with all accessories etc.(2 run for SBI Connect also)	0	m				
2	Supply and fixing of CAT 6 Modular- Information outlet- , with SM box on wall / partitions etc.	0	No.				
	.i) RJ 45 data sockets –double module						
	.ii) RJ 45 data sockets –single module(BM cabin, cash cabin, customer PC, SWO and server room)	0	No.				
3	Supply and installation of 8U/12U wall mounted type rack. With cable manager (HCL/Valrack make)	0	No.				
4	Supply and Installation of CAT6 24 port patch panel in the 4U wall mounted type rack.	0	No.				
5	Supply and installation of CAT6 24 port s 1000 Mbps switch(Giga Bit switch) in the 6U wall mounted type rack	0	No.				
6	Supply and installation of 1 m long patch chord.(CAT 6)	0	No.				
7	Supply and installation of 2 m long patch chord. (CAT 6)	0	No.				
8	Supply and installation of 3 m long patch chord. (CAT 6)	0	No.				
PART - D SUB - TOTAL AMOUNT IN FIGURES							
PART - D TOTAL AMOUNT IN FIGURES							
		SUPPLY AMOUNT IN WORDS				ERECTION AMOUNT IN WORDS	
	PART - A						
	PART - B						
	PART - C						
	PART - D						
	SUB TOTAL						
	GRAND TOTAL						