STATE BANK OF INDIA							
	PRICE BID FOR ELECTRICAL WORKS AT IIT DHARWAD BRANCH						
	Particulars : Detailed Specifications A: ELECTRICAL WIRING WORKS	Unit	ևuantit	Rate	Amount		
1	ENERGY METER CUBICLE: Fabrication, Supply, Installation,	Set	0				
	3 Nos. 63A Open Type bakelite cutout fuse unit with 63A HRC						
	1 no. 63A 4 pole SFU with 63A HRC fuse (HPL/C&S/Indoasian)						
	Complete with all inter connections and powder coated						
2	BUILDING MAIN PANEL: MAINS CHANGE OVER PANEL Supply and installation of 63A 4pole ON Load Change over switch with suitable metallic enclosure with cable entry Box and Powder coated painted with 6nos of 2A SP MCB and LED (R,Y,B) indicators for the identification of EB/ DG Set — ON & neat marking thereof: (GA drawing to be got approved from consultant/Engineer before fabrication & supply) a. Change over switch: 63A On-Load COS b. MFM - (c 0.5) to show the V,A,pf,kW,kVA,etc details (L&T or Schnider) c. SPD - Type-1+2 d. R,Y,B Indicators for EB & DG supply (6nos) e. 1A SP MCB - 6 nos Complete with all inter connections and powder coated pointing BAL 7032 sigmens grow	Set	1				
3	painting-RAL 7032 siemens grey. Supply & Installation of 20 KVAR automatic capacitor panel	Set	0				
	Incoming 634 75k4 AP MCCR with enreader 0-1004 ammeter with selector switch RVR indicating lamn 0-500 Volts Voltmeter 6 Stage & D.F.C. Relav Outgoing 634 TDMCR Canacitor duty contactor 5KVAr Resin Canacitor with Harmonic fitter ONLOFF nuch hutton & Ind Lamn						
4	Main DB — (VTPN - DB): Supply, Installation, testing and Commissioning of Double Door TPN DB consisting of the Double door 4-way VTPN MCB VDB Incomer 63A, 25kA, 4P MCCB Outgoings: 63A, TP MCB (C-series) -0nos 40A, TP MCB (C-series) -0nos 32A, TP MCB (C-series) -0nos 25A, TP MCB (C-series) -2nos 16A, SP MCB (C-series) - 2nos	Set	1				
	10A, SP MCB (C-series) - 1nos 160A COPPER Bus-bar for 3 phase						
1	r	ı			I		

	Complete with all inter connections.			
5	ACDB — (TPN - DB): Supply, Installation, testing and Commissioning of Double door (4-way) TPN MCB DB consisting Double door 4 way TPN MCB DB Incomer 25A,300mA 4P RCCB +25A MCB C-series Outgoings: 25A, TP MCB (C-series) -0nos 16A, TP MCB (C-series) -0nos 16A, SP MCB (C-series) -4nos 10A, SP MCB (C-series) -3nos 80A COPPER Bus-bar for 3 phase Complete with all inter connections.	Set	1	
6	LDB: Supply, Installation, testing and commissioning of Double			
	door TPN MCB DB consisting of the following. Double Door 4-way TPN MCB DB Incomer: 25A,30mA 4P RCCB +25A MCB B-series Outgoings: 25A,30mA DP RCCB - Onos For lighting circuit 10A, SP MCB (B-series) -6nos 6A, SP MCB (B-series) - 6nos Complete with all inter connections L+RPDB: Supply, Installation, testing and commissioning of Double door TPN MCB DB consisting of the following. Double Door 4-way TPN MCB DB Incomer: 25A,100mA 4P RCCB +25A MCB C-series Outgoings: 25A,30mA DP RCCB - 1nos 10A, SP MCB (C-series) -8nos 6A, SP MCB (C-series) - 4nos	Set	1	
	Complete with all inter connections			
8	ESSENTIAL DB: Supply, Installation, testing and Commissioning of Double door SPN MCB DB consisting of the following.	Set	1	
	Double door 6-way TPN MCB DB Incomer : 32A TP MCB (C-series) Outgoings: 25A MCB TP (C-series) - 2Nos UPS INPUT 6A, SP MCB (C-series)-2 nos UPS exhaust fan & LIGHTING 16A, SP MCB (B-series) -1 nos signage boards 24hr digital timer 1NO,1NC - 2 nos			

	Complete with all inter connections.			I
	,			
9	ATM DB: Supply, Installation, testing and commissioning of Double door (8+4way) TPN MCB DB consisting of the following.	Set	0	
	Double Door 4-way TPN MCB DB			
	Incomer:			
	25A,300mA 4P RCCB +25A MCB C-series			
	Outgoings :			
	32A, TP MCB (C-series)- 0			
	16A, SP MCB (C-series) -1 nos AC			
	16A, SP MCB (B-series) -0 nos signage boards			
	6A, SP MCB (B-series) - 4 nos - ATM signage board and ATM			
	lighting ckt,			
	24hr digital timer 1NO,1NC - 2 nos			
	Complete with all inter connections.			
10	BUS BAR Box — Supply, Installation, testing and Commissioning			
	of single door Bus bar box with following .			
	100A Copper bus bars-25mmX3mm X150mm -4nos with			
	insulators mounted on insulator bushes. \ / for remote UPS	Set	0	
	200A Copper bus bars-25mmX4mm X150mm -4nos with			
	insulators mounted on insulator bushes. \// for remote UPS	Set	0	
	100A 4P Isolator enclusure At banking hala entrance	Set	1	
	3			1
11.a	UPS IN PUT DB Supply and installation of 40 A FP MCB	C . I	_	
	ISOLATOR in suitable metallic enclosure for UPS Input.	Set	2	
11.b	UPS OUT PUT DB Supply and installation of 32A DP MCB	Set	2	
	ISOLATOR in suitable metallic enclosure for UPS Input.	361		_
12	UPS CHANGE OVER PANEL: Supply erection testing and			
	commissioning of 2 Nos. 32A rotary type change over switch in			
	suitable metal box with 4 Nos. LED indicator for input / output	Set	1	
	identification. UPS Output change over switch board. Complete			
	with all inter			-
13	COMPUTER DB: Supply, erection, testing and commissioning of			
12	wall mounted type double door dust and vermin proof SPN	Set	2	
	MCB DB fixed on wall comprising the following:	Jet	_	
	SPN MCB DB -8Way			
	Incomer :			
	20A, DP MCB (C-series) -1			
	Outgoings :			
	10A, SP MCB (C-series) -4			
	6A, SP MCB (C-series) -2			
	Complete with all inter connections.			

14	Supply and installation of suitable weather proof enclosure for			
	local control of 3ph/1ph air conditioners.			
	Supply and installation of 64A FP MCB (D-series) in suitable			
a.	weather proof enclosure(IP65) for local control of 3ph/1ph air		0	
	conditioners.	set	U	
D.	Supply and installation of 20/32A DP MCB in suitable weather			
	proof enclosure(IP65) for local control of 3ph/1ph air	Set	2	
	conditioners.			
C.	Supply and installation of 20/32A TP MCB in suitable weather	Set	0	
	proof enclosure(IP65) for local control of 3ph air conditioners.			
4.5	Control in talleting of DOL states for DUMP and a site			
15	Supply and installation of DOL starter for PUMP motor with	Set	0	
	thermal overload protection, for 2kW motor			
10	CARLE LAVING AND TERRATIONS S			
16	CABLE LAYING AND TERMINATIONS: Supply, laying and			
	dressing of the following size of 1.1 KV grade XLPE insulated			
	armoured cable with aluminium conductor concealed or			
	clamped on wall / ceiling / trench / cable tray if necessary.			
	i) 4x240 Sq.mm AYFY	m	0	
	ii) 4x95 Sq.mm AYFY	m	0	
	iii) 4x70 Sq.mm AYFY	m	0	
	iv) 4x50 Sq.mm AYFY	m	0	
	v) 4x35 Sq.mm AYFY	m	0	
	v) 4x25 Sq.mm AYFY	m	40	
	vi) 4x16 Sq.mm AYFY	m	30	
	vii) 4x10 Sq.mm AYFY	m	0	
	viii) 3x6 Sq.mm AYFY	m	0	
17	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) 4x240 Sq.mm AYFY	set	0	
	ii) 4x95 Sq.mm AYFY	set	0	
	iii) 4x70 Sg.mm AYFY	set	0	
	iv) 4x50 Sq.mm AYFY	set	0	
	v) 4x35 Sq.mm AYFY	set	0	
	vi) 4x25 Sq.mm AYFY	set	4	
	vii) 4x16 Sq.mm AYFY	set	4	
	viii) 4x10 Sq.mm AYFY	set	0	
	VIII) TATO SQ.IIIIII ATI I	ડદા	U	
18	GI - CABLE TRAY: Suppy and installation of medium duty GI			
-	Ladder type cable tray of following size. (Rate shall be inclusive			
	of all bends supports, etc. And supports to be not more than			
	1000mm apart)			
	·	<u></u>	_	
	i) 450mmx50mm(WxH)	m	0	
	ii) 650mmx50mm(WxH)	m	0	J I

	iii)300mmx50mm(WxH)	m	0	
	EARTHING AND LIGHTING PROTECTION			
a.	Supply and providing ISI pipe earthing as per IS 3043 with 2.5m	l		
	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	l	2	
	the portion with excavated soil, providing brick work	l		
	masonries, plastering, fixing cast iron cover of 30x30cm size			
b.	Making of Copper plate(600mmx600mmx3mm) Earth-pit as per			
	IS 3043 complete with charcoal, funnel set etc., including	l		
	making of 450 x 450mm brick masonary chamber with CI /	l	2	
	stone / fabricated / RCC cover with lifting handles stone /		_	
	fabricated / RCC cover with ligting handles etc., complete as			
C.	EARTH CONDUCTORS Supply and laying of the following size of			
	bare copper conductor along with above cables, for	l		
	interconnections between panels, DBs, change over switches	l	50	
	etc.and also for interconnections between earth pits. i) No.10			
d.	Supply and laying of 2 X No. 10 SWG copper conductor through		F.0	
	20mm PVC conduit for UPS earthing.	m	50	
e.	Supply and laying of 25x3mm GI strip/tape supported on			
	porcelain insulator on every 1m distance for lighting arrester	ı m	0	
	system – the strip shall be insulated from having any direct			
_	contact from the building -shall use UPVC conduits while			
Ι.	Supply and installation of - Copper Lightning arrestor spike – of 1m supported over proper insulator and connected to GL strip		0	
	using proper nut bolt system.	1403		
g.	Supply & installation of 4m length 40mm dia C-class GI pipe to			
	be fixed over the terace of the building to erect Copper	l	0	
	lightning arrester spike. The pole shall be mounted on			
h.	Supply and providing tinned copper earth bench using 25 \times 3	Set	3	
	mm copper strip (25 Cm in length)	361		
20	MANUAL TOP HOUT TAN PINO COCKETS FTO PRINT MINING			
20	WIRING FOR LIGHT, FAN, PLUG, SOCKETS ETC: Point Wiring: Supply and wiring for light /fan/exhaust fan/calling bell/mirror			
	lamp/ bulkhead light/ wall fans etc . With 3plate ceiling rose	l		
	and by using 3x1.5 sqmm. (1.5sqmm) . PVC insulated copper			
	conductor wire in 20mm dia 1.5mm thick rigid PVC conduit,			
	controlled by 5A modular switches with provision for modular			
	type Ceiling fan regulator on separately fabricated MS Box. The	l		
	M.S box should be earthed properly. One way point.			
a.	Single light point controlled by a 6 Amp switch.	Nos	50	
	each Secondary light point connected to the single light points	Nos	27	
	controlled by a switch.			
c.	2-WAY controlled lighting point for staircase, bed switch etc.	Nos	1	

	Wall fan / Exhaust fan point - 6A, 3 pin modular socket on		l	l	
u.	suitable metal box for wall fan controlled by switch in common	Nos	10		
e.	Ceilingl fan point - controlled by 6A switch in common SB with modular stepped regulator.	Nos	2		
21	Supply and fixing of Modular type 5A 3pin plug points controlled by 5A modular switch mounted on suitable box (on common switch board) only in Strong room, Record/ Stationary	Nos	4		
22	Supply and fixing of Modular type 5A 3 pin plug points with 5A modular type switch in separate location.	Nos	3		
23	Raw Power Switch Box : Same as above but for 2 Nos . modular type 5 A 3 pin plug points with 2 nos. 5A modular type switch in separate location. (both sides of cash cabin desk, nodes etc)	Nos	5		
24	Supply and fixing of modular type 15A plug socket with 15A modular type switch mounted on suitable Box(for Mgr cabin, Cash Cabin, Pantry, Water cooler, etc.).	Nos	3		
25	Supply and installation of combined 5A modular plug socket with 5A modular switch & 15A combined modular plug socket with 15A modular switch in single box.(for EB supply at cashier counters / Manager cabin/UPS for ATM)	Nos	2		
26	Supply and providing 16A 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 back office manager & EB supply to strong room, line printer and record/	Nos	2		
27	Supply and Installation of 25A Modular type 3 pin plug socket with suitable metallic box for air curtain/air conditioners.	Nos	2		
28	Supply and Installation of 20A /32A Modular type DP switch having indicator with suitable metallic box for the local control of the air conditioners/air Curtain.	Nos	3		
29	UPS Power Stations ::: Supply install Test and commissioning of computer power stations with 3nos 5A modular type socketswith 1nos 15A modular type sockets controlled with(1nos. 15A modular type single pole switch with indicator mounted on M/S Box.) / controlled by master switch (item 39) The boxes should be Fixed on — wall/ partitions(wooden, concealed or open as required at site. Maximum 3 sets per	Nos	8		
30	Same as above but for 3 Nos. modular type 5 A 3 pin plug points with 2 nos. 15A modular type switch in separate location.(for Data Kraft rack / I/O Rack/ Cash cabin)	Nos	2		
	Same as above but for 2 Nos. modular type 6 A 3 pin plug points with 2 nos. 6A modular type switch with indicator in separate location.(for countrers, Head cashier, etc on wall panel/partition - Above the tabe and on wall for token	Nos	2		
32	Supply, install, test and commissioning of 16A modular type master switch with indicator with suitable PVC box for the main control of UPS stations in the counters.	Nos	10		

33	Supply & Installation of USB charger oulets controlled by 6A switch (in Privillage lounge/ Hall)	Nos	2	
34	CIRCUIT WIRING: Supply and wiring wall / floor etc. / recessed / surface as per colour code with 3 runs of 1.1KV grade 1.5 Sqmm PVC insulated flexible copper wire for phase neutral and earth conductor with standard colour coding, through ISI marked 20mm dia(medium) rigid PVC conduit with all accessories. The rate includes the cost of complete wiring from switch box to switch box. THE WIRING SHALL BE DONE CONSEALED.		30	
35	Same as above but with 3 x 2.5 Sq.mm PVC Insulated copper wire(FRLS Type).(for lighting main circuit, 15A plug points & UPS point wiring) (power circuit to VRF IDUs)	m	370	
36	Same as above but with 3 X 4sqmm. PVC insulated copper wire(FRLS Type). (for $1.5 / 2$ T AC and UPS Out put COS to computer DB and for the Name Boards if there are multiple name boards or extra ordinary lengthy—Name Boards)	m	60	
37	Same as above but with 3 x 6 Sq.mm PVC Insulated copper wire through rigid conduit (32mm) on wall and flexible conduit on floor for UPS Input.(4m length x 2 UPS), AC input $3Tr/4Tr$ inv	m	30	
38	Same as above but with 4 x 2.5 Sq.mm with 2 x 1.5 sq.mm (for 3ph 3T inverter AC units) in 32mm dia conduit	m	0	
39	Same as above but with 4 x 4Sq.mm with 2 x 2.5 sq.mm (for 3ph 4T inverter AC units)	m	0	
40	Same as above but with 4×6 Sq.mm with 1×4 sq.mm (for 3ph UPS input)	m	20	
41	Same as above but with 4 x 10 Sq.mm + 1 x 6 sqmmPVC Insulated copper wire through rigid conduit on wall of 38mm	m	0	
a. b.	PVC CONDUITS:Supply and Fixing of following sizes of FRLS PVC conduit along with the accessories in surface in ceilling/ recess in walls, flooring including cutting the wall / floor etc., and making good the same in case of recessed conduit as required. 32mm dia. Conduit (Medium) 25mm dia. Conduit (Medium)	т п п	45 40 55	
	LIGHT FIXTURES & FANS Supply and Installation of 36~40W 600mmx600mm Square recess mounting (gypsum board ceiling) LED type luminaire (including required fixing frame, chain for suspending fron RCC ceiling) -Wipro, HPL, Havells, Orcus, 595mmx595mm cut out	Nos	17	
b	Supply & installation of 20 $^{\sim}18$ Watts DLED type LED light fitiing with lamps and white reflector on false ceiling (UPS Light points) - $^{\sim}205$ mm cut out		9	

С	Supply & installation of 9^{10} Watts DLED type LED light fitiing with lamps and white reflector on false ceiling - 135 mm cut	Nos	37	
d	Supply and Installation of minimum 5m lenght flexible LED strip lights of 22~24 watts in false ceiling coves of Blue / warm White shades with necessary LED driver of same make	m	30	
	Supply and fixing of 2~3 watts LED spot lamp / swivel downlight - warm light for photoframe / decor lighting	Nos	0	
	Supply and fixing of 1 X 20W LED Batten light set on wall /ceiling. Slim with metal body	Nos	8	
	Supply and Installation of 20~40W 2'x2' suspended / (drop) ceiling hanging type Round luminaire decorative (including required fixing frame) -Wipro, HPL, Havells, Orcus, Philips	Nos	0	
h	Supply and Installation of 36~40W out door type street light fixture LED including required fixing frame/pipe,) -Wipro, HPL, Havells, Orcus	Nos	0	
	Supply & installation of 60 Watts LED light down lighter and on false ceiling (for double height area) - Wipro, HPL, Havells,	Nos	0	
	Supply & installation of calling bell	Nos	1	
k	Supply and installation of 9" size medium duty exhaust fan. (Toilets/dinning)	Nos	2	
ı	Supply and installation of 12" size medium duty exhaust fan. (UPS Room)	Nos	2	
m	Supply and Installation of 400 mm sweep wall fan with metal body and blades	Nos	5	
	Supply amd installation of 1200mm sweep ceiling fan. 5 star rated. (High Speed)	Nos	2	
0	Supply and providing fan rod with painting (upto 1m length) (other than that supplied with fan and if required)	Nos	0	
р	Supply and providing fan hook on ceiling.	Nos	0	
	Supply and installation of 9W LED bulb with suitable batten holder (Toilets & UPS light points)	Nos	0	
	Supply and Installation of step type modular electronic regulator, 100W	Nos	2	
S	24hr digital /Anolog timer 1NO,1NC - 1 nos UPS exhaust fans	Nos	1	
44	Electrical safety - RUBBER mats of 1.1kV grade 1.8mx.0.9m	Nos	1	
45	Supply and fixing of: 1nos First aid kit, Safety chart, Danger boards-2nos, No Admission boards-1nos	Set	1	
46	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	

47	Charges for Preparation of SLD (Single Line Diagram), Network diagram of the whole electrical & LAN installations using AutoCAD, Lamination and displaying it inside the UPS room. (Size – A3 /A2/A1).	L.S	1	
48	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.	L.S	0	
49	Arranging temporary wiring for counters and cabins during renovation work	L.S	0	
50	Removing old and unwanted wirngs, panels, fixtures from the premises, and disposing the same.	L.S	0	
	PART - A TOTAL AMOUNT IN FIGURES			
PART-	B TELEPHONE WIRING			
	Supply and wiring using 2 pair telephone cable (0.5mm2) in 20mm PVC conduit from the KRONE Box to the individual points. One separate cable for each point. Number of cables in			
	one conduit limited to 5.			
a.	2 pair telephone cabling	m		
b.	10 pair telephone cabling	m		
	Supply and fixing of RJ 11 type modular telephone socket on suitable PVC / metal boxes.			
a.	Telephone socket - single (modular type)	Nos		
	Telephone socket - double (modular type)	Nos		
	Total Control of the			
3	Supply and installation of KRONE connector telephone junction	Set		
	Supply and installation of KRONE connector telephone junction	300		
	box of 20 pair.	Set		
	PART - B TOTAL AMOUNT IN FIGURES			
PART-	C: PA & MUSIC SYSTEM			
	Supply and wiring as per colour code transparent speaker cable	m	0	
2	Supply and providing 9W recessed type speakers on ceiling CS	Nos	0	
	PART - C TOTAL AMOUNT IN FIGURES			
PART-	D: DATA CABLING			
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)	m	450	
2	Supply and fixing of 2nos of CAT 6 Modular Information outlet with SM box on wall / partitions etc.	Nos	6	

3	Supply and fixing of 1nos of CAT 6 Modular Information outlet with SM box on wall / partitions etc.	Nos	3					
4	Supply and installation of 12U wall mounted type rack. (HCL/Valrack make)	Nos	1					
5	Supply and Installation of CAT6 24 port patch panel in the floor/wall mounted type rack. With cable manager	Nos	1					
6	Supply and installation of CAT6 26 port (1000Mbps) switch in	Nos	0					
7	Supply and installation of 1 m long patch chord. (CAT 6)	Nos	15					
8	Supply and installation of 2 m long patch chord. (CAT 6)	Nos	9					
9	Supply and installation of 3 mlong patch chord. (CAT 6)	Nos	1					
10	Supply and installation of 5 mlong patch chord. (CAT 6)	Nos	1					
11	Testing of NODES with reports. (with PENTA scan reports)	Nos	15					
	PART - D TOTAL AMOUNT IN FIGURES							
	·							
	PART - A							
	PART - B							
	PART - C							
	PART - D							
	TOTAL (EXCLUDING)							