## BILL OF QUANTITY OF ELECTRICAL WORKS N/W: PROVIDING ELECTRICAL WORKS FOR INDIAN BANK, KISHANGANJ BRANCH AND ATM, BIHAR **BRANCH** SUB HEAD-I (WIRING) A. SUB HEAD-II (DISTRIBUTION BOARDS & PANELS) B. C. SUB HEAD-III (SUPPLY OF FIXTURES & FANS) SUB HEAD - IV (SUPPLY OF CABLE MAIN & SUBMAIN) D. SUB HEAD - V (SUPPLY & MAKING OF EARTHPITS) F. TOTAL: **GST AS APPLICABLE** UNIT SL. NO. ITEM OF WORK QTY RATE AMOUNT SUB HEAD - I (WIRING) Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq mm FR PVC insulated copper condtr single core cable in surface/ recessed PVC conduit with modular switch, modular plate, suitable GI box and earthing the 3rd point with Each 52 1 1.5 sgmm FR PVC insulated copper conductor single core cable etc as reqd. (ups Wiring for A.C. Point with 2 x 4 sqmm FR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit / PVC Casing - n Capping along with one no 4 sq mm FR PVC insulated copper conductor single core cable for loop Mtr. 150 2 earthing as required. Sub main Wiring for Light/Fan Power D.B. with 4 x 4 sqmm FR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit / PVC Mtr. 22 Casing - n Capping along with 1X4 sq mm FR PVC insulated copper conductor single core cable for loop earthing as required. Sub Main Wiring from LT Panel to TPN D.B. for RAW power of computer with 4 x 4 sqmm FR PVC insulated copper conductor single core cable in surface recessed PVC conduit / PVC Casing - n Capping along with 1X4 sq mm FR PVC Mtr. 25 insulated copper conductor single core cable for loop earthing as required. Sub main Wiring between LT Pnael to UPS Panel, and UPS Panel to UPS feed D.B. with 2 x 6 sqmm FR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit / PVC Casing - n Capping along with one no 6 sq Mtr. 42 mm FR PVC insulated copper conductor single core cable for loop earthing as Wiring for light/ fan circuit wiring with 2 x 2.5 sqmm FR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit / PVC Casing - n Mtr. 125 7 Capping along with one no 2.5 sq mm FR PVC insulated copper conductor single core cable for loop earthing as required. Wiring for Power plug wiring with 2 x 2.5 sqmm FR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit / PVC Casing - n Capping along with one no 2.5 sq mm FR PVC insulated copper conductor single 8 Mtr. 35 core cable for loop earthing as required. wiring computer point with 2 x 2.5 sqmm FR PVC insulated copper conductor single core cable surface/ recessed PVC conduit / PVC Casing - n Capping along with one no 2.5 sq mm FR PVC insulated copper conductor single core cable for 490 9 Mtr. loop earthing as required. Supply & fixing suitable size GI box with modular plate and cover in front on 10 surface/ in recess including providing & fixing 5 pin 5/6 amp modular socket outlet Set 10 and 5/6 amps modular switch, connection, painting etc as required. Supply & fixing AC controller unit consisting of one no 25 amp AC controlle having overload protection starter, one no 20/25 amp SPN MCB and socket outlet 11 Set 7 all fixed on a modular plate complete with metal box and recessed in wall as Supply & fixing suitable size GI box with modular plate and cover in front on surface/ in recess including providing & fixing 6 pin 15/16 amp modular socket 3 12 Set outlet and 15/16 amps modular switch, connection, painting etc as required. Supply & fixing remote controlled call bell buzzer suitable for 230 V AC/ Battery pperated with remote type bell push as reqd.





12	Supply & fixing of computer point with 3 no. 5 pin 5/6 amp modular socket with modular type switch for UPS Power and 2 no. 5 pin 5/6 amp modular socket with modular type switch phenolic laminated sheet suitable size PVC/G.I. box. As per	nos.	12		
	instruction of Bank/Ele.Er./as required.				
	O LOS in Company in the later was few plate and MC housing		4.1		
13	Supply & fixing of approved make including square face plate and M.S. housing box with RJ-11 socket etc complete in all respect conduits as required.(Each Section Head work station have 2 no. of RJ 11 Socket)		11 25		
а	RJ-11 socket	Set.	5		
b	Supplying and drawing 2 pair 0.5 sqmm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/PVC conduit as required.	Mtr.	150		
14	Supplying and drawing fixing 8 SWG copper conductor wire for loop earthling as required.	Mtr.	45		
15	Supply & fixing Commissioning of 9U rack for 24 line Net all complete as required.	Set.	1;		
16	Suppling and fixing of 24 port switch for networking.	Set.	1	IMI_L	
16	Suppling and fixing of 24 port switch for networking.	361.	+ -		100 Maria
17	Supply & fixing of approved make including square face plate and M.S. housing box with RJ-45 socket etc complete in all respect including cat-6 Data cable conduits, identification of the hub		4		
a	IO box with RJ-45 socket.	Set.	11		TIE HI
b	Cat-6 Data cable with PVC conduit	Mtr.	450		
С	Supply & fixing Commissioning of 2 Meter Patch Cord as required, all complete	Set.	12		
	TOTAL SUB HEAD-I				14 (14 (14 (14 (14 (14 (14 (14 (14 (14 (
					The sheller
SUB HE	AD - II (DISTRIBUTION BOARDS & PANELS)	40146			10110765
	Supplying & Fixing following ways three pole and neutral sheet steel MCB DB, 415 volts on surface/ recessed complete with tinned copper busbar, neutral				
1	busbar, earth bar din bar detachable gland plate interconnections, phosphatised and powder painted i/c earthing etc as reqd. ( But without MCB / RCCB/Isolator)		**		
а	4 Way double door VTPN DB.	Each	2		
b	16 Way double door SPN DB.	Each	1		
С	8 Way double door SPN DB. For atm	Each	1		20-20 (1) 011-1410 100 (1) 1-1410 (1)
2	Supply & fixing 5 amps to 32 amps rating 240 V 'C' series MCB suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc as reqd.				
а	10/16 A 10 KA SP MCB "B"	Each	34		92
b	63 A 10 KA FP MCB "C"	Each	2		
С	40A 10 KA DP MCB	Each	2		
	Supply & fixing of indoor cubicle extensible type fully compartmentalized				
3	Distribution panel suitable for operation on 415 volts 50 Hz 3 phase 4 wire AC distribution system, suitable for 35 KA short circuit rating, confirming to IP:42 degree of protection, made up of 1.6 mm thick CRCA sheet, wall/ floor mounted, dust & vermin proof enclosure, having hinged and earthed cover on front, having neoprene gasket/ katings stuck to the doors, duly painted with 65- 75 microns thick dry epoxy powder paint after 7 tank process of degreasing, derusting etc comprising of the following switchgears complete with all interconnections with suitable size of copper strip/hard drawn PVC insulated copper cable i/c keeping the panel in position, minor civil works as necessary, painting, sign writing etc complete as required (as per specifications of Panel attached) TEST REPORT: FOLLOWING REPORTS HAVE TO BE PROVIDED BY THE VENDOR AT THE TIME OF SUBMISSION OF BILL:.  1) FINAL AS BUILT PLAN IN THREE COPIES DRAWN TO THE SCALE, PRINTED IN CASE OF CAD AND BLUE PRINT, IN CASE OF MANUAL DRAWING.  2) QUALITY REPORT INDICATING THE ITEMS USED WITH THEIR MAKES.  3) PANEL MANUFACTURER'S CPRI TEST REPORT.  4) ROUTINE TEST REPORT OF PANEL FOR IR & HV TEST.  5) GUARANTEE/WARRANTY CARD OF PANEL MANUFACTURER.(Panel Size-H-1400mm, W-900mm & D-300mm)	Set	1		





	INCOMING:				
					110
	a) 100 amp 4 pole MCCB not less than 25 KA having Thermo magnetic type				in the
	release for a range of 80% to 100% for Overload and short circuit complete with	A Transport			et a de
	rotary handle etc as reqd.: 1 no	· · · · · · · · · · · · · · · · · · ·	-		
	b)63 amp 4 pole heavy duty I-II-I type cubicle changeover switch: 1 no		- 11	The state of	2.00
					14,00
-	METERING:			LTELSTA	
	a) Multifunctional meter displaying A/V/PF & Hz along with 3 nos Suitable size				1000
- 1			-		1
	CTs & HRC type protection fuse etc as reqd: 1 nos		_		
	NED to the state of the state o		_		
	c) LED type phase indicationg lamp in phase distinguishing colors with HRC fuse :			l .	1000
C. C. C.	6nos				e Sintan
TE F					600
1,50	BUS BAR:				Selso:
			_		
	Main Bus Bar: 4 strip 200 amp bus bar made of electrical grade aluminium strip			100	
	enclosed in separate bus bar chamber, provided with DMC/ SMC bus bar support		*w	130000	15
1	duly insulated with heat shrinkable sleeves in distinct colours as reqd: 1 set				
	Emergency Load Bus Bar: 4 strip 150 amp bus bar made of electrical aluminium				
	copper strip enclosed in separate bus bar chamber, provided with DMC/ SMC bus				ille divine
	bar support duly insulated with heat shrinkable sleeves in distinct colours as reqd:				\$110000
	1 set			-	
100	OUTGOINGS:			307	* Alt Things
	40 amp, 10 KA D Series FP MCB: 1 nos.				all the same
	40 amp, 10 KA D Series DP MCB: 2 nos.	NA .			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
	The second secon		-	-	1000000300
	25 amp 10 KA C series SPN MCB: 8 nos.			84.4	THE PERSON NAMED IN
	63 A rotary type Phase selector: 2 no				· Unit cont
31 100	63 amp DP Manual Change Over For UPS Charging-1 nos.				1000
					1900
					14 1 1
	SITC of indoor cubicle type UPS panel suitable for operation on 415 volts 50 Hz,				Art some
	3 phase 4 wire AC distribution system, AC supply, suitable for 35 KA short circuit		100		HEALT
	rating, confirming to IP:42 degree of protection, made up of 1.6 mm thick CRCA			1	
	sheet, wall/ floor mounted, dust & vermin proof enclosure, having hinged and			18	
100	earthed cover on front, having neoprene gasket/ katings stuck to the doors, duly				
4	painted with 65- 75 microns thick dry epoxy powder paint after 7 tank process of	nos.	- 1	134.	101-1-
	degreasing, derusting etc comprising of the following switchgears complete with				
	all interconnections with suitable size of copper strip/hard drawn PVC insulated				
	copper cable i/c keeping the panel in position, minor civil works as necessary,				
	painting, sign writing etc complete as required. (as per specifications of Panel				
	attached)				
	INCOMING:		-	+	THE WALLEST WA
	a) 40 amp FP MCB 10 KA D series.: 1 no.				
7	b) 63 amp Phase Selector- 1 no.				- 31/4/77
	METERING:			Edit 1	4/11 hattail 14/2
	a) Digital Volt meter displaying voltage with 3 nos HRC type protection fuse etc as			And the same	
			- 30		
	reqd: 1 nos		-		
	UPS INPUT & OUT PUT				
	3 no 40 A SPN MCB 10KA with 3 no 40 amp Industrial type socket out let and Top		1.0	117	
	with connection o/g MCB with PVC insulated copper conductor wire as required		100		
	(For 2 no. main input and 1 no. output)			3 4 4	
	OUTGOINGS:		- "		
	a) 40 amp SPN MCB 10 KA B Series: 2 nos		L FIT	-	
					_ 400000000
0.00	TOTAL SUB HEAD-II				
UB HEA	AD - III (SUPPLY OF FIXTURES & FANS)				rost de m
					48/10/10/00/01/24
		Each	3	<del></del>	
4	Cumplying of CM/OM/LED botton guitable for indeer application	Eacn	3		th the overeithing
1	Supplying of 6W/9W LED batten suitable for indoor application.		_		
11					00000 (Allenger 2
•	Supplying of stepped type electronic fan regulator on the existing modular plate		,		
		Each	2		
	Supplying of stepped type electronic fan regulator on the existing modular plate		2		
2	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.		2		
2	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated		2		
2	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated housing with ABS plastic bottom frame with electronic driver duly wired up to the	Each			THE THE PROPERTY OF THE PROPER
2	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated housing with ABS plastic bottom frame with electronic driver duly wired up to the terminal block, luminaire suitable for armstrong ceiling and grid ceiling complete		2 19		
3	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated housing with ABS plastic bottom frame with electronic driver duly wired up to the terminal block, luminaire suitable for armstrong ceiling and grid ceiling complete with separate electronic driver.As approved make by Electrical	Each			
3	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated housing with ABS plastic bottom frame with electronic driver duly wired up to the terminal block, luminaire suitable for armstrong ceiling and grid ceiling complete	Each			
3	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated housing with ABS plastic bottom frame with electronic driver duly wired up to the terminal block, luminaire suitable for armstrong ceiling and grid ceiling complete with separate electronic driver.As approved make by Electrical	Each			
3	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated housing with ABS plastic bottom frame with electronic driver duly wired up to the terminal block, luminaire suitable for armstrong ceiling and grid ceiling complete with separate electronic driver.As approved make by Electrical	Each			
3	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated housing with ABS plastic bottom frame with electronic driver duly wired up to the terminal block, luminaire suitable for armstrong ceiling and grid ceiling complete with separate electronic driver.As approved make by Electrical consultant/architect etc as reqd.	Each			
3	Supplying of stepped type electronic fan regulator on the existing modular plate switch box i/c connection but excluding modular plate etc as reqd.  Supplying, installation, testing & fixing of 36W LED CRCA white powder coacated housing with ABS plastic bottom frame with electronic driver duly wired up to the terminal block, luminaire suitable for armstrong ceiling and grid ceiling complete with separate electronic driver.As approved make by Electrical consultant/architect etc as reqd.  Supplying of recess mounted circular LED (dia-6") downlighter 9/12 Watt LED	Each Each	19		





5	Supplying, installation, testing & fixing of 1X36 W tube light fitting powder coated batten with PC tube.	Each	8	
6	Supplying of Exhaust fan 300mm sweep HEAVY DUTY EXHAUST make- CROMPTON / approved equivalent.	Each	3	270 H = 1750 H
7	Supplying of 1200 mm sweep energy efficient ceiling fan, connection with 1.5 sqmm PVC ins copper condtr, testing, commissioning etc as reqd.	Each	0	
8	Supplying of oscillating and tilting type wall bracket fan of 450 mm sweep i/c fixing the same on wall with, connection with 1.5 sqmm PVC insulated copper conductor, testing, commissioning etc as required. (Make Usha, Bajaj, Havells)	Each	11	
	TOTAL SUB HEAD-III			
UB HE	AD - IV (SUPPLY OF CABLE MAIN & SUBMAIN)			
1	Supply & laying for sub main from L.T line & DG line following sizes and core PVC/XLPE insulated PVC sheathed, heavy duty, armored electrical cable with aluminum conductor for working voltage up to and including 1100 volts.(Conforms tolS:1554.part-1) with 8 no. SWG die bare copper conductor wire for loop earthling, proper laying on wall or roof, thumbnail clipping and use proper size cable gland for cable sport etc. as required. all complete as per instructions of Elec.Er. / Architect.			
а	35 sq.mm, 3.5 core LT Cable	Mtr.	30	
	TOTAL SUB HEAD-IV			Constitution (I)
UB HE	AD - V (SUPPLY & MAKING OF EARTHPITS)			2 (5 (6)(63(16)) 3 (16) (5
1	Earthing with GI earth plate 600mm x 600mm x 6 mm thick accessories and pdg masonary enclosure with cover plate having locking arrangement and watering pipe etc ( but without charcoal or coke and salt) complete as required.	Set	4	
2	Extra for using charcoal and sal for GI / copper earth plate electrode as required ( 96 Kg charcoal & 5 Kg salt)	Set	4	
3	Providing & laying earth connection from earth electrode with 6 SWG dia GI wire in 15 mm dia. GI pipe from earth electrode as required.	Mtr.	40	
4	S/L 6 SWG G.I.wire on surface or in recess as reqd.	Mtr.	35	
(Dila	High voltage insulation mat are relatively thin mats of thicknes (2mm to 3.5mm)			white the s
5	made of elastomeric polymers materials having a high insulation restance, thus imparting total safety of humen being from any leakage current.(Size-4'X5')  TOTAL SUB HEAD-V	Sqft	40	



