S.no.	BOQ FOR ELECTRICAL WORKS OF KA	Qty	Unit	Rate Excl GST	Amount Excl GST
		~-,			
1	FIXTURES:				
	Supply, Installation, Testing & Commissioning of the following Lighting Luminaries with necessary fixing accessories. (Philips/ Havells/Crompton/Wipro Make.)				
i	20W LED, 4 feet batten light fixture with Aluminium housing. (Philips Make Model BN021C LED20S PSU CW GR S2 or Equivelent)		no		
ii	10W LED, 2 feet batten light fixture with Aluminium housing (Wipro Make Model LL20-111- xxx-65NE or Equivelent)	5	no		
ii	Supply & Installation of 36W 2X2 LED LIGHT fixtures (Havells - VENUSNEOHE2X2PLR36WLED8XXS (OR) Equivalent models in other approved makes) including cost and conveyance of all materials, taxes and all labor charges etc., complete. with all inter connections and fixing arrangement (should be hanged with the help of chains/GI from the ceilng) as required. The price should be include fixing arrangement in Gypsum/ Grid ceiling etc.(wipro /Philips /Havells)	25	no		
iii	Supply & Installation of 12W <b>LED DOWN LIGHT</b> fixture. (Havells:- ENDURANEODLR12WLED857S or Equivalent models in other approved makes) including cost and conveyance of all materials, taxes and all labor charges etc., complete.(wipro /Philips /Havells)		no		
iv	Supply &Fixing of 1200 mm sweep Crompton Make High Speed Revara Ceiling fan with standard down rod,Fan Hook, all accessories Electrical connections. Including fixing materials required. (Crompton Sea Wind or Khaitan Zolta make or equivalent)	4	no		
v	Supply & Fixing of 400 mm sweep Wall mounted fan (plastic blade) with 3 pin Plug on the lead wire of each fan all accessories Electrical connections. Including fixing materials required.  ( Havells Swing model or Crompton Hi Flo Make or equivalent)	8	no	Interr	al
vi	Supply and fixing of 450mm ALMONARD Tempest Mark–II hiflow medium duty noiseless type wall mounting fan (Metal blade) for banking hall including – 1 No 6A modular socket, in PVC surface box & front plate – 2 module.	0	no		
vii	Light duty Exhaust fan of 200-250mm fresh air ventilator type with louver complete for Toilets( 9") - Crompton/ Khaitan/Havells make	2	no		
viii	Heavy duty 300mm sweep exhaust fan with metallic blades for UPS Room (12") -Crompton/ Khaitan/Havells make	1	no		

	MAIN INCOMING PANEL: /MCP/MCCP			
2	MAIN INCOMING PANEL: (MCB/MCCB-			
	Legrand/Schneider/L&T Make)			
	SITC of Wall / Floor mounting Type, dust and vermin proof main distribution board panel fabricated of 18swg (powder			
	coated) comprising of Busbar (each of RYB +N) copper 150 amp each, 125Amp MCCB 4P adjustable 25kA -1no as			
2.1	incomer, Digital Panel Meter- 3 Phase VAF + PF Meter (L&T/Legrand). On load Generator change over 100 amp 4 p switch should be available in the panel with connection only for lighiting and UPS control and R, Y, B Phase indicating lamps. (Provide labeling in Panel) including DANGER sign and necessary precautions, Earth Bus Bar 25x5mm GI strip- 2 nos (At the bottom) & Outgoing consisting of:  Lighiting & Raw power Control -  1 nos of 4p 40A RCCB for lighiting, 1 nos of 40A 4P MCB, and 16 nos of 10/16A SP MCB for outgoing lighiting distribution (SB - 9), Raw power control (5) and 2 Nos of 20A DP MCB for outgoing Inverter and GSB Control. Future provision to be provided for 4 SP MCBs with dummy plates.  ACs distribution Control:  2 no of 4p 63A MCB for AC, 10kA adjustable, 2 Nos of 20A DP MCB (5+5)for outgoing ACs distribution control. Future provision to be provided for 2 DP MCBs with dummy plates.  1 nos of 40A 4P MCB for UPS Control.	1	no	
2.2	SITC of 150A kit Kats Fuse unit 3 nos in wooden patra complete with 150 Amp. Neutral link complete in all respect	1	set	
-	as required.			
3	<b>DISTRIBUTION BOARD:</b> (Legrand/Schneider/L&T Make)			
	Supplying and fixing following way, horizontal type three pole			
	and neutral, sheet steel, MCB distribution board, 415 V, on			
3.1	surface/ recess, complete with tinned copper bus bar, neutral			
"	bus bar, earth bar, din bar, interconnections, powder painted			
	including earthing etc. as required. (But without			
	MCB/RCCB/Isolator)			
3.1.1	UPS DB: ATM			
i	12 way , Double door	1	no	
3.1.1	UPS SUB DB and RAW POWER DB:			
i	UPS SUB DB: 8 way , Double door	1	no	
3.1.2	STRONG ROOM DB: (Outside Strongroom)			
i	6 way , Double door	1	no	
	NOTE: Provide label in all DBs.			

	NOTE: The Electrical Wiring inside the Strong Room should be in a CONDUIT and POWER CUT OFF SYSTEM either AUTO / MANUAL PLUG SYSTEM drawing power only from the Limit Switch in case of "Auto Power Cut Off System" is provided in the Door OR from the FEEDER BOX fitted outside the Strong Room (near the door) in case of Manual Plug System. The MANUAL PLUG SYSTEM OF POWER CUT OFF should be such that the connecting cable passes through the Strong Room Defender Door from inside to outside, which should be			
	accessible only after opening the S.R. door (thus ensuring that the door can not be closed without removing the plug + wire and hence total power inside the Strong Room is cut off leaving no chances of fire resulting from an Electrical source / High Voltage / Surging even with the Switches in Off position). Inverter/ UPS Power inside strong room should be provided through MCBs outside strong room.			
	MINIATURE CIRCUIT BREAKER: (Legrand/Schneider/L&T			
4	Make) Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.			
61	LIGHTING DB MCBs:	0		
i	6/10A Single Pole	0	no	
ii	20/32A Double Pole (Inverter i/p & Glow Sign Board) 40A Four Pole	0	no	
4.1	ATM DB MCBs:	U	no	
i	10A Single Pole	0	no	
ii	40A Double Pole	0	no	
ii ii	20A Double Pole	0	no	
	STRONG ROOM DB MCBs:	0	110	
i	16A Double Pole	1	no	
	NOTE: ( 3 MCBs for RAW Power, UPS & Inverter Supply/Spare). Include cost of manual plug system for raw power.			
6.4	UPS MAIN DB MCBs: ATM			
i	40A Double Pole	1	no	
ii	10/16A Single Pole	0	no	
iii	25A Double Pole	0	no	
	<b>NOTE:</b> ( 2 MCBs for UPS input & 1 MCB for stabilizer input/spare)			
4.3	UPS SUB DB MCBs:			
i	10/16A Single Pole	6	no	
ii	40A Double Pole	1	no	
5	AC STABILIZERS:			
i	AC Stabilizers: Supply & installation of V Guard VND 500 model 15A 150 VAC - 285 VAC METAL stabilizer with 3 years warranty for Split AC. The works involves in installation, labour, transportation etc., complete.	5	no	

	AC Ctabilinary County & installation of 1/ County 1/ND 400			
	AC Stabilizers: Supply & installation of V Guard VND 400			
ii	model 12A 150 VAC - 285 VAC METAL stabilizer with 3 years	3	no	
	warranty for Split AC. The works involves in installation,			
	labour, transportation etc., complete.			
6	MINIATURE CIRCUIT BREAKER: (Legrand/Schneider/L&T			
	Make)			
6.1	Supplying and fixing FP sheet steel enclosure on surface/			
	recess along with 63 A 415 V "C" curve TPN MCB complete			
	with connections, testing and commissioning etc. as required.			
6.1.1	UPS INPUT MCB:			
i	63A Four Pole	1	no	
	Supplying and fixing DP sheet steel enclosure on surface/			
6.3	recess along with 25/32 A 240 V "C" curve DP MCB complete			
6.2	with connections, testing and commissioning etc. as required.			
6.2.1	UPS INPUT MCBs: BRANCH			
i	40A Double Pole	2	no	
6.2.2	UPS OUTPUT MCBs: BRANCH			
i	40A Double Pole	1	no	
ii	25A Double Pole: atm	1	no	
6.2.3	INVERTER INPUT MCB:			
i	25A Double Pole	1	no	
6.2.4	INVERTER OUTPUT MCB:			
	25A Double Pole	1	no	
h	AC OUTPUT MCB: (Legrand/Schneider/L&T Make)			
	Supplying and fixing 20 A, 240 V, SPN Industrial type socket			
	outlet, with 2 pole and earth, metal enclosed plug top			
	alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure,			
7.1	on surface or in recess, with chained metal cover for the	٥	no	
		0	110	
	socket out let and complete with connections, testing and			
	commissioning etc. as required.			
	MANUAL PHASE CHANGEOVER:			
	Supply & fixing of 3 Phase 63A Manual Phase Changeover			
	Switch without OFF for UPS input. (L&T Make)	1	20	
8	Switch without OFF for OPS input. (L&T Make)	1	no	
	C DIN COCKET WITH CWITCH-/Anchor/Cohnoider/Logrand			
	6 PIN SOCKET WITH SWITCH:(Anchor/Schneider/Legrand			
	Make). Supplying and fixing suitable size GI box with modular plate			
	and cover in front on surface or in recess, including providing			
	and fixing 6 pin 5/6 & 15/16 A modular socket outlet and			
	15/16 A modular switch, connections etc. as required.			
0.1	INVERTER:			
	Inverter input & output	1	no	
	RAW POWER POINT:	1	no	
	Cash Cabin	1	no	
	WATER DISPENSER	1		
	UPS POWER POINT:	1	no	
		2	20	
	Cash Cabin	2	no	
	Hub connector (BRANCH)	4	no	
iii	CCTV & Fire Alarm (BRANCH )	4	no	

			1	1	T
	<b>NOTE:</b> The complete alarm systems and CCTV systems power				
	connections must be taken before the output MCB of the UPS				
	connection to ensure continuous power supply to the security				
	systems. separate MCB to be provided near CCTV Fire Alarm				
	System power points.				
	System power points.				
-	3 PIN SOCKET WITH SWITCH:(Anchor/Schneider/Legrand				
10	Make)				
	Supplying and fixing following modular switch/ socket on the				
	existing modular plate & switch box including connections but				
10.1					
	excluding modular plate etc. as required.				
i	5/6 A switch for socket in switchboard	8	no		
ii	3 pin 5/6 A socket outlet in switchboard	8	no		
	Supplying and fixing suitable size GI box with modular plate				
	and cover in front on surface or in recess, including providing				
10.2	and fixing 3 pin 5/6 A modular socket outlet and 5/6 A				
10.2	1				
	modular switch, connections etc. as required.				
i	Counters	8	no		
ii	Manager Cabin	2	no		
iii	Wall Mounted Fan	8	no		
	UPS POINT FOR COMPUTERS/ PRINTERS: (Anchor/		-		
11	Schneider/ Legrand Make) [In Counter, Manager Cabin &				
	Banking hall				
	Supplying and fixing following size/ modules, GI box				
111					
11.1	alongwith modular base & cover plate for modular switches				
	in recess etc. as required.				
i	8 Module (125mmX125mm)	16	no		
	Supplying and fixing following modular switch/ socket on the				
11.2	existing modular plate & switch box including connections but				
	excluding modular plate etc. as required.				
i	15/16 A switch	12	no		
ii	6 pin 15/16 A socket outlet	24	no		
	FAN REGULATOR: (Anchor/Schneider/Legrand Make).	27	110		
	Supplying and fixing two module stepped type electronic fan				
	regulator on the existing modular plate switch box including				
12		4	no		
	connections but excluding modular plate etc. as required.				
	POINT WIRING: (Switch- Anchor/Schneider/Legrand Make)				
	(Wiring- Finolex/Havells/ Poly Cab Make)				
	Wiring for light point/ fan point/ exhaust fan point/ call bell				
	point with 1.5 sq.mm FRLS PVC insulated copper conductor				
	single core cable in surface / recessed medium class PVC				
12					
13	conduit, with modular switch, modular plate, suitable GI box				
	and earthing the point with 1.5 sq.mm FRLS PVC insulated				
	copper conductor single core cable etc. as required.				
- i	One Light point controlled by one 6A switch.	17	no		
ii	Two Light point controlled by one 6A switch.	24	no		
iii	Group B (Fan/Exhaust Fan Points)	8	no		
-"	Group B (Wall Mount Fan Points) with 3 pin 5/6 A modular	U	110		
iv	socket outlet and 5/6 A modular switch, connections etc. as	8	no		
۱۷		J	110		
	required.				1

	Croup A (Call Dall Daint)				
V	Group A (Call Bell Point)	1	no	<del></del>	
14	CIRCUIT/SUBMAIN WIRING: (Finolex/Havells/ Poly Cab	1 )	1	I	
$\vdash$	Make)	igsquare	1	1	+
	Wiring for circuit/ submain wiring alongwith earth wire with	1 )	<b>1</b>	[	
1 14 1	the following sizes of FRLS PVC insulated copper conductor,	1 )	1	[	
	single core cable in surface/ recessed medium class PVC	1	<b>1</b>	[	
	conduit as required.	1	<b>1</b>	<u> </u>	4
	NOTE: Essential/Non essential/UPS Distribution each will		<b>1</b>	[	
	have a completely independent and seperate distribution		<b>1</b>	[	
	system starting from the main, switchboard upto final wiring	1 )	<b>1</b>	[	
	for each system.		<u> </u>		
-	Main DB to LDB				
i	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	0	Mtr		
14.1.1	LDB to First Point (or) Switch Board (Lighting Circuit Wiring)	1	 !		
		$\longrightarrow$	1	<del>                                     </del>	+
1	NOTE: Lighting circuit shall not have more than a total of 10	1	<b>1</b> 1		
	points of light, fan and socket outlets, or a total connected	1	1		
<u> </u>	load of 800W, whichever is less.	<u> </u>	1	<u> </u>	
	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	200	Mtr	-	
-	Main DB to UPS input DB and Raw power DB	لب	1		
	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	35	Mtr		
-	UPS input DB to UPS	Ш	1		
-	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	35	Mtr		
	UPS Output MCB to UPS SUB DB	$\Box$			
	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	45	Mtr		
14.1.5	UPS & RAW Power Circuits (Power circuit wiring)	╚			
	NOTE: Power circuit shall have a maximum of 2 Points only in	1	- <del></del>		
<u> </u>	1 Circuit.	<u>'</u>	! 		
	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	200	Mtr		
	Main DB to AC DB				
i	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	0	Mtr		
	AC DB to AC units				
	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	75	Mtr		
	4 X 6 sq. mm + 1 X 6 sq. mm earth wire	0	Mtr	Ţ	
	Sign Board (LDB to Name Board)	1	ı	Ţ	
-	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	20	Mtr		
	Supplying and drawing following sizes of FRLS PVC insulated				
	copper conductor, single core cable in the existing surface/	1	<b>1</b>		
14/	recessed steel/ PVC conduit as required.	1	<b>1</b>		
1		1	<b>1</b>		
14 2 1	UPS to UPS output MCB	$\longrightarrow$	<u> </u>	†	+
-	2 x 6 sq. Mm	10	Mtr	<del>                                     </del>	+
-	Main DB to Switch Box (Inverter wiring)	10	IVILI	<del>                                     </del>	+
	1 x 1.5 sq. mm	100	Mtr	<del>                                     </del>	+
	MV CABLE LAYING:	-00	IVILI	<del>                                     </del>	+
<del>                                     </del>	Laying and fixing of one number PVC insulated and PVC	$\longrightarrow$	<u> </u>	<del>                                     </del>	+
14.3	sheathed / XLPE power cable of 1.1 KV grade of following size		<b>1</b>		
14.3		1 )	<b>1</b>	[	
$\vdash$	on wall surface as required.	$\longrightarrow$	1	<del> </del>	+
-	Meter to Kit Kat Fuse to Main DB	$\longrightarrow$	1	<del>                                     </del>	+
	Upto 50 sq. mm (clamped with 1mm thick saddle)	<u> </u>		<del>                                     </del>	<del>                                     </del>
	50 sq. mm	20	Mtr	<u> </u>	
-	TELEPHONE POINT WIRING:	Щ	1	<u> </u>	
	Supply , fixing , testing of phone point with suitable GI boxes		<b>1</b>		
15.1	with Telephone socket (RJ-11) with mounting box & front	3	no		
اــــا	plate complete in all respect.		1 1		
	<del></del>				

Supply, installation, testing and commissioning of 20 pair Krone Make/ equivalent telephone tag block duly enclosed in in sheet metal powder coated box with lock & key mounted on in wall complete with necessary terminations.  Supplying and drawing following pair 0.5 mm dia FRLS PVC cabulated annealed copper conductor, unarmored telephone cable in the new surface/ recessed steel/ PVC conduit as required.  15.3.1 From Telephone Junction Box to Socket  i 2 Pair  15.2.2 From Telephone pole to Mgr cabin  i 4 Pair  Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including conduit as required.  i 20 mm  i 20 mm  0 Mtr  ii 25 mm  0 Mtr  iii 25 mm  0 Mtr  iii 25 mm  0 Mtr  iii 26 EARTHING:  15.1. Plate Earthing: (For UPS Neutral Earth)  Earthing with copper earth plate 600 mm x 600 mm x 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long tex with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble recevacion and re-filling as required.  Providing and laying earth connection from earth electrode with 6.5WG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Providing and laying earth connection from earth electrode with 6.5WG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar - 25mmXamm x150mm - 4 mos with insulators mounted on insulator bushes Havelis/ e		·								
15.3. insulated annealed copper conductor, unarmored telephone cable in the new surface/ recessed steel/ PVC conduit as required.  15.3.1. From Telephone Junction Box to Socket  1 2 Pair  15.3.2. From Telephone pole to Mgr cabin  1 4 Pair  Supphyling and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including class of care in case of recessed conduit as required.  15.4. Cutting / chipping the weal and making good / finish the same in case of recessed conduit as required.  1 20 mm  1 0 Mtr  1 25 mm  2 0 Mtr  1 25 mm  3 0 Mtr  1 Earthing: (For UPS Neutral Earth)  Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering of the excavation and re-filling as required.  Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6.5WG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Bushar -25mm/Smm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  Supply & Installation of rubber mats (Class-A) of 1000 mm x	15.2	sheet metal powder coated box with lock & key mounted on	1	no						
i 2 Pair 15.3.2 Prom Telephone pole to Mgr cabin i 4 Pair Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including 15.4 cutting / chipping the wall and making good / finish the same in case of recessed conduit as required.  i 20 mm		insulated annealed copper conductor, unarmored telephone cable in the new surface/ recessed steel/ PVC conduit as required.								
15.3.2 From Telephone pole to Mgr cabin 1 4 Pair Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting / chipping the wall and making good / finish the same in case of recessed conduit as required.  1 20 mm 0 Mtr 16 EARTHING: 16 EARTHING: 16 EARTHING: Earthing with coper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.  Pipe Earthing: Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 1 230 V, complete as required.	15.3.1	From Telephone Junction Box to Socket								
i A Pair Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including 15.4 cutting / chipping the wall and making good / finish the same in case of recessed conduit as required.  i 20 mm	i	2 Pair	20	Mtr						
i A Pair Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including 15.4 cutting / chipping the wall and making good / finish the same in case of recessed conduit as required.  i 20 mm	15.3.2	From Telephone pole to Mgr cabin								
Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including 15.4 cutting / chipping the wall and making good / finish the same in case of recessed conduit as required.  i 20 mm			15	Mtr						
ii 25 mm	15.4	conduit along with accessories in surface/recess including cutting / chipping the wall and making good / finish the same								
16. EARTHING:  16.1 Plate Earthing: (For UPS Neutral Earth)  Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.  16.2 Pipe Earthing:  Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  Supply & Installation of rubber mats (Class-A) of 1000 mm x	i	20 mm	0	Mtr						
16. EARTHING:  16.1 Plate Earthing: (For UPS Neutral Earth)  Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.  16.2 Pipe Earthing:  Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with i cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  Supply & Installation of rubber mats (Class-A) of 1000 mm x	ii		0							
16.1 Plate Earthing: (For UPS Neutral Earth)  Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.  16.2 Pipe Earthing:  Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  Supply & Installation of rubber mats (Class-A) of 1000 mm x				-						
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pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.l. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.  16.2 Pipe Earthing:  Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with i cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 17 230 V, complete as required.  Later of the control of the contro		Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure	1	Sat						
with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.  16.2 Pipe Earthing:  Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  1 no  Supply & Installation of rubber mats (Class-A) of 1000 mm x	'	pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.		361						
Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  Supply & Installation of rubber mats (Class-A) of 1000 mm x	ii	with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble	75	Mtr						
Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.  Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  Supply & Installation of rubber mats (Class-A) of 1000 mm x	16.2	Pine Farthing:								
with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.  Supply & fixing of Bus Bar Chamber with 100 A Copper Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  1 no  Supply & Installation of rubber mats (Class-A) of 1000 mm x		Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe	1	Set						
Busbar -25mmX3mm X150mm - 4nos with insulators mounted on insulator bushes Havells/ equivalent Make  CALLING BELL: (MANAGER CABIN & DISCUSSION ROOM)  Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  Supply & Installation of rubber mats (Class-A) of 1000 mm x	ii	with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.	45	Mtr						
Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.  Supply & Installation of rubber mats (Class-A) of 1000 mm x	18	Busbar -25mmX3mm X150mm - 4nos with insulators	0	no						
17 230 V, complete as required. 1 no  Supply & Installation of rubber mats (Class-A) of 1000 mm x										
	17	230 V, complete as required.	1	no						
	18		1	no						
Total Electrical works (A)		Total Electrical works (A)		Total Electrical works (A)						

	DATA CABLING WORKS					
S.no.	Item description	Qty	Unit	Rate (excl GST)	Amount	
1	Supply & laying of Lan cabling to the all tables cat 6e UTP(D-Link Make) cable run through 25mm dia rigid PVC pipe including necessary clamps screws concealed in wall where ever necessary completed in all respects. The data cabling pipe should be laid at a minimum distance of 3 ft from pipes laid down for power distribution.	320	Mtr			
2	Supply and Fixing of Cat -6e XL RJ 45 Toolless information outlets with Single face plate with single connector & block mount box		no			
3	Supply & Fixing of 7 feet patch cards with end clips (D-Link Make)	18	no			
4	Supply & Fixing of 3 feet patch cards with end clips (D-Link Make)	18	no			
5	Supply, Fixing & Testing of CAT-6 UTP 24 Port Jack Panel fully loaded (D-Link Make)	2	no			
6	Supply & Fixing of 9U wall Mounted Rack with as per requirement with all accessories	1	LS			
·	Total Data Cabling works (B)					
Total Electrical and Data Cabling (C = A + B)						
GST @ 18%						
	GRAND TOTAL					