	DETAIL ESTIMATE FOR ELECTRICAL WORKS			-		
	ITEM DETAILS	QTY.	UNIT	RATE	AMOUNT	
	-I : COMPUTER POINTS & DISTRIBUTION					
1	Supply all material, storing, handling, fixing of computer points computer points in suitable size of GI/PVC box		each			
	including providing 2 nos 15 amps 5 pin modular sockets to be provided under table top and controlled by 1 no 15					
	A moduler type switch and indicator (to be provided					
	above the table top in partition) with moduler cover					
	plate etc complete as required including 3X2.5 sq. mm					
	copper armored cable Note: Maximum two computer					
	points are to be provided on one circuit. (Switches :					
	Make: Anchor/Crabtree/North-West/MK					
2	Supply, installation, testing and commissioning of factory					
	fabricated distribution board rust inhibited powder coated sheet fabricated comprising of incoming and outgoing					
	isolator & MCBs neutral link or neutral bus, top and					
	bottom detachable entry earthing bolts interconnection					
	and grouting bolts etc complete as required as per details					
	below. Make: Havells/HPL/Standard/ Legrand/L&T					
a)	4 way SPN MCBDB comprising of 1 No 32 Amp DP	1	No			
- /	Isolator and 2 No SPMCB 10/16 Amp. (UPS output)					
b)	4 Way TP MCBDB Double Door in recessed wall		no.			
	including cutting of wall and making good the damages					
	comprising 1 no 63 A FP TPN and 3 Nos.32 A					
	DPMCBS, 6 NOS. 6-15 A SPMCB etc complete as required. (for Air conditioning, UPS supply and					
	lighting).					
3	Providing and fixing, testing and commissioning of Heavy					
	Duty modular air-conditioning plug & socket arrangement:					
-	OF own air conditioning point modules type cooket ( to be					
a)	25 amp air-conditioning point modular type socket { to be fixed 1.5 foot below false ceiling} with 25 amp DPMCB C		no.			
	SERIES {to be fixed at Normal Height}.					
4	Providing and fixing of suitable size MS box fabricated	1	job			
	with 16 G MS sheet either in recess wall or on surface to		,			
	accommodate dedicated earth from earth electrode and					
	further distribution of earth to computer points including					
	providing of 5 mm bakelite on base connector strip and					
	painting of box etc as required.					
5	Basic electrical Wiring of light points, plug points					

	Wiring for light point/ ceiling fan point/ exhaust fan point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit ISI Mark, with 6Amp modular switch, modular plate, suitable GI junction & switch boxes & clip and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.(Wires Make: HaveIIs/ RR Kable / KEI/Finolex) (Switches : Make: Anchor/Crabtree/North-West/MK)			
	(Rate includes 3 x 2.5 sq.mm FRLS copper conductor, single core cable in PVC conduit for circuit/sub main wiring along with earth wire )			
a)	single 6 Amp Switch controlling 1 light point for T-5, Wall Fans, exhaust Fans , Ceiling fan and other seprate room supply only	4	no.	
b)	single 6 Amp Switch controlling 4 no. downlights / 4 no. LED downlight / 2 no. 2'- 0"x 2'-0" 36 watt light fittings	3	no.	
c)	single 6Amp socket controlling by 5Amp Modular switch in switch boards etc complete as required	2	no.	
	Note: Lihgts/fans points to be calculated by numbers of lights and no extra cost shall be paid for dummy switch.)			

-II : PANELS , KIT KATS & CABLES				
-II. PANELS; KIT KATS & CABLES				
Providing and fixing of 03 no 100 Amps KITKAT with 1 no	1	job		
neutral link on suitable size of Bakelite sheet of thickness				
not less than 12 mm complete as required				
Supply, Installation, testing & commissioning of PVC				
insulated PVC sheathed armoured cable of 1100 V ( IS				
;1554 Part 1) and fixing of cable on wall with suitable size				
of clamps /saddles or laid in floor/recess wall including				
cutting of wall /floor and making good the damages etc				
complete as required of following sizes (ISI marked).				
(Make: Havells/ RR Kable / KEl/Finolex/Pymen)				
3.5X25 sq. mm aluminum conductors armoured cable	40	mtr.		
with two Nos. 8 SWG GI wire				
3X4 sq. mm copper conductors armored cable with	20	mtr.		
one Nos. 8 SWG GI wire				
3X2.5 sq. mm copper conductors armored cable	20	mtr.		
-				
of PVC insulated and PVC sheathed / XLPE				
aluminium/Copper conductor cable of 1.1 kV grade as				
·				
3.5X 25 sq.mm aluminum conductor	2	no.		
	neutral link on suitable size of Bakelite sheet of thickness not less than 12 mm complete as required Supply, Installation, testing & commissioning of PVC insulated PVC sheathed armoured cable of 1100 V ( IS ;1554 Part 1) and fixing of cable on wall with suitable size of clamps /saddles or laid in floor/recess wall including cutting of wall /floor and making good the damages etc complete as required of following sizes (ISI marked). (Make: Havells/ RR Kable / KEI/Finolex/Pymen) 3.5X25 sq. mm aluminum conductors armoured cable with two Nos. 8 SWG GI wire 3X4 sq. mm copper conductors armored cable with one Nos. 8 SWG GI wire 3X2.5 sq. mm copper conductors armored cable (Metal Clad or Modular AC points to be provided adjacent to the Acs. Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium/Copper conductor cable of 1.1 kV grade as required.	neutral link on suitable size of Bakelite sheet of thickness not less than 12 mm complete as required Supply, Installation, testing & commissioning of PVC insulated PVC sheathed armoured cable of 1100 V ( IS ;1554 Part 1) and fixing of cable on wall with suitable size of clamps /saddles or laid in floor/recess wall including cutting of wall /floor and making good the damages etc complete as required of following sizes (ISI marked). (Make: Havells/ RR Kable / KEI/Finolex/Pymen) 3.5X25 sq. mm aluminum conductors armoured cable with two Nos. 8 SWG GI wire 3X4 sq. mm copper conductors armored cable with one Nos. 8 SWG GI wire 3X2.5 sq. mm copper conductors armored cable with adjacent to the Acs. Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium/Copper conductor cable of 1.1 kV grade as required.	neutral link on suitable size of Bakelite sheet of thickness not less than 12 mm complete as required Supply, Installation, testing & commissioning of PVC insulated PVC sheathed armoured cable of 1100 V (IS ;1554 Part 1) and fixing of cable on wall with suitable size of clamps /saddles or laid in floor/recess wall including cutting of wall /floor and making good the damages etc complete as required of following sizes (ISI marked). (Make: Havells/ RR Kable / KEI/Finolex/Pymen) 3.5X25 sq. mm aluminum conductors armoured cable with two Nos. 8 SWG GI wire 3X4 sq. mm copper conductors armored cable with one Nos. 8 SWG GI wire 3X2.5 sq. mm copper conductors armored cable with one Nos. 8 SWG GI wire 3X2.5 sq. mm copper conductors armored cable (Metal Clad or Modular AC points to be provided adjacent to the Acs. Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium/Copper conductor cable of 1.1 kV grade as required.	neutral link on suitable size of Bakelite sheet of thickness not less than 12 mm complete as required Supply, Installation, testing & commissioning of PVC insulated PVC sheathed armoured cable of 1100 V ( IS ;1554 Part 1) and fixing of cable on wall with suitable size of clamps /saddles or laid in floor/recess wall including cutting of wall /floor and making good the damages etc complete as required of following sizes (ISI marked). (Make: HavelIs/ RR Kable / KEI/Finolex/Pymen) 3.5X25 sq. mm aluminum conductors armoured cable with two Nos. 8 SWG GI wire 3X4 sq. mm copper conductors armored cable with one Nos. 8 SWG GI wire 3X2.5 sq. mm copper conductors armored cable with one Nos. 8 SWG GI wire 3X2.5 sq. mm copper conductors armored cable (Metal Clad or Modular AC points to be provided adjacent to the Acs. Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium/Copper conductor cable of 1.1 kV grade as required.

b)	3X4 sq. mm Copper cable gland.	2	no.	
	3X2.5 sq. mm Copper cable gland.	4	no.	
9	Making necessary provisions for keeping the branch in	0	Job	
	working condition by providing or maintaining temporary	Ũ		
	electrical ponts for the computers/ac's/lighting etc. as per			
	the direction of the Engineer-in-charge including the costs			
	of the material, labour and dismantling.			
	or the material, labour and dismanting.			
10	UPS DISTRIBUTION BOARD			
	supply, installation, testing and commissioning of factory			
	fabricated distribution board rust inhibited, powder coated			
	sheet fabricated comprising of incoming and outgoing			
	isolator and MCB's neutral link or neutral bus, top and			
	bottom detachable entry earthing bolts interconnection			
	and grouting bolts etc complete as requd. Make:			
	Havells/HPL/Standard/ Legrand/L&T			
	as per details below :-			 
	Providing & fixing 16 S.W.G. M.S. Sheet adapter box,			
	and also base frame for installation of M.C.B. D.B.'s plug	1	samt	
	&socket arrangement and to cover cables in system room	I	sqmt.	
	including painting etc. complete			
11	Providing and laying following sizes of PVC insulated			
	copper conductor cable of 1100 V in flexible/ PVC conduit			
	pipe with accessories such as glands bends etc ( as per			
	requirement) including making necessary interconnection			
	etc complete as required.			
	2 X 6 Sq mm with 1 no suitable insulated 2.5 sq mm multi	15	mtr.	
	stranded copper wire in PVC flexible pipe. (Make:			
	Havells/ RR Kable / KEI/Finolex)			 
12	EARTHING		<u> </u>	
a)	a)Supply and fix copper plate earth station with	1	Sets	
	600X600X3mm copper plate and termination of 20 x 3			
	copper strip with earth station 5m in length below ground			
	level etc. as required, including all accessories such as			
	watering pipe and funnel and providing masonry			
	enclosure at top with cover plate i.e excavation of pit,			
	supplying and filling of salt charcoal, refilling of pit etc			
	complete as required as per IS 3043-1987. The voltage			
	between neutral and earth must be below 1 V.			
13	a)Providing and fixing of 8 SWG copper earth wire in the	25	Meter	
	recess for loop earthing etc. as required.			
14	Supply and laying following dia 2 mm in thickness ISI			
	Mark PVC pipe under floor or in recessed walls from			
	earth electrode to UPS room for computer dedicated			
	earthing			
	25 mm diameter	25	Meter	
	IV - TELPHONE & DATA CABLE			

1 5	Data cabling work for computer networking starting from	4	no	
15	mounting rack at system room with UTP CAT-6e LAN	4	no.	
	Data cable in 2mm thick 25 mm dia ISI mark PVC conduit			
	with accessories such as bends, Tees, junction boxes			
	including providing and fixing cat-6 I/O plates and SMB			
	complete with all networking accessories etc complete as			
	reqd. (Make: D-LinK/MOLEX/AMP/COMMSCOPE).			
	Note: Only One Data Points to be provided in One			
	<b>Table/Counter. Extra poitns not to be paid if provided</b> . Maximum 6 no. data cable must be run in one pvc pipe.			
	maximum o no. data cable must be full in one pvc pipe.			
16	supply, installation, testing and commissioning of 24-port	1	no.	
	Patch Panel			
17	Supply and installation, testing and commissioning of	1	no.	
	mounted rack 15" hight made of powder coated MS sheet			
18	supply, installation, testing and commissioning of factory			
	manufactured CAT-6e patch chord complete with 2 no.			
<u> </u>	connectors etc. complete as reqd.			
	1 mtr. long	3	no.	
b)	2 mtr. long	3	no.	
19	PART-V : LIGHTS & FANS FIXTURES SITC of 2"x2" Celing grid 33-36 watt LED panel fixtures	2		
19	with essential driver in false ceiling including making	2	no.	
	necessary arrangement for mounting the fixtures and			
	connection with 2 x 1.5 sq.mm insulated copper cable			
	CONNECTION WIT Z X 1.3 SQ.IIIII INSUIATED COPPER CADIE			
	from adjacent point in PVC flexible pipe etc Complete as			
	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent			
20	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj.		no.	
20	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential	3	no.	
20	from adjacent point in PVC flexible pipe etc Complete as reqd. <b>Make BAJAJ cat. BZRSQL 43L LED GF or equivalent</b> <b>of Wipro / Bajaj.</b> SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary		no.	
20	from adjacent point in PVC flexible pipe etc Complete as reqd. <b>Make BAJAJ cat. BZRSQL 43L LED GF or equivalent</b> <b>of Wipro / Bajaj.</b> SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection	3	no.	
20	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent	3	no.	
20	from adjacent point in PVC flexible pipe etc Complete as reqd. <b>Make BAJAJ cat. BZRSQL 43L LED GF or equivalent</b> <b>of Wipro / Bajaj.</b> SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection	3	no.	
20	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make	3	no.	
20	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of	3	no.	
	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj.	3		
	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj. SITC of 18 watt of T5 LED fixtures directly on ceiling /	3		
	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj. SITC of 18 watt of T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5	2		
	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj. SITC of 18 watt of T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc. complete as reqd Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj.	2		
	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj. SITC of 18 watt of T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc. complete as reqd Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj. SITC of 400/450 mm Metal sweep wall fan	2		
21	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj. SITC of 18 watt of T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc. complete as reqd Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj. SITC of 400/450 mm Metal sweep wall fan Crompton/Orient/Khaitan/Bajaj with 3 pin plug complete	2	no.	
21	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj. SITC of 18 watt of T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc. complete as reqd Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj. SITC of 400/450 mm Metal sweep wall fan Crompton/Orient/Khaitan/Bajaj with 3 pin plug complete as required. (complete metal body)	3	no. no.	
21	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj. SITC of 18 watt of T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc. complete as reqd Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj. SITC of 400/450 mm Metal sweep wall fan Crompton/Orient/Khaitan/Bajaj with 3 pin plug complete as required. (complete metal body) LED Strip light (4.5/5 watt) for cove (M/s Phillips /Wipro /	2	no.	
21	from adjacent point in PVC flexible pipe etc Complete as reqd. Make BAJAJ cat. BZRSQL 43L LED GF or equivalent of Wipro / Bajaj. SITC of 15 watt LED fixtures /dowlighters with essential driver in false ceiling including making necessary arrangement for mounting the fixtures and connection with 2 x 1.5 sq.mm insulated copper cable from adjacent point in PVC flexible pipe etc complete as reqd. Make BAJAJ cat no. 112676 BPSLR 15W WH or equivalent of Wipro / Bajaj. SITC of 18 watt of T5 LED fixtures directly on ceiling / wall including making necessary connections with 2x1.5 sq.mm insulated copper cable conductor wire etc. complete as reqd Make Phillips cat no. DN - 192 - 1000 or equivalent of Wipro / Bajaj. SITC of 400/450 mm Metal sweep wall fan Crompton/Orient/Khaitan/Bajaj with 3 pin plug complete as required. (complete metal body)	3	no. no.	

24	SITC of 200 mm exhaust fans complete with self opening louvers / shutters including necessary frame etc, complete as reqd. (M/s Crompton High Breeze or equivalent of USHA / Bajaj)	1	no.	
25	SITC of Automatic Programmable Time Switch 24 Hour for Glow sign board and ATM AC's (Make: L&T or equivelent to Legrand/Havells/Seimens)	1	no.	
	PART-VI : AIR CONDITIONING REFRIGERATION/DRAIN WORKS			
26	Supplying & Laying of following COPPER REFRIGERANT PIPING Thickness 22 SWG For Air Conditioners units complete with fittings Suction / Discharge line insulated with 12 mm SUPERLON / ARMAFLEX suction line. Multi-runs between Indoor & Outdoor units shall be considered as ONE length for the purpose of measurement. (Make: Total Line/Armacell)			
a)	1/4" + 1/2" Refrigerant Copper piping - For Hiwall Split AC's (1.0Tr / 1.5Tr )	20	mtr.	
27	Supplying & laying recessed in wall Rigid ISI Mark PVC drain pipe of size 20mm dia complete with fittings, U traps etc. & as specified to the nearest toilet / drain point under floor or in recessed walls for AC drains including cutting of walls, bends & Tees. making good the damages etc. wherever required. (Make: Diplast/Supreme)	15	mtr	
28	Supplying and providing Eletrical flexible FRLS Copper cable of 3 x 2.5sq.mm multi strand suitable for 1.0Tr / 1.5 Tr H.W Split / 2.00 Tr Cassette Multi-runs between Indoor & Outdoor units and between Metal Clads to Out door for electrical supply etc complete as required (Make: Havells/ RR Kable / KEI/Finolex)	25	mtr	
29	Supply, Installation, Teating and commissioning of 1.5 Tr capacity Hot and cold High Wall Split unit Air- conditioners (inverter type) with 3-star rating as per the manufacturer's specifications. (Make: Voltas, Blue star, Hitachi, Carrier)	2	Units	
	TOTAL OF PART : I +II+III+IV (A)			
	TOTAL OF PART : V+VI (B)			
	TOTAL AMOUNT (A+B)			
	GRAND TOTAL			
	Contengencies and GST as applicable shall be extra.			