

Estimate for Electrical Work at Canara Bank , Hapur Regional Office, Delhi Road, Hapur					
SN	DESCRIPTION OF ITEM	QTY.	UNIT	RATE	AMOUNT
	PART-A				
	UPS & AC POWER DISTRIBUTION				
1	Supply all materials receiving, storing, handling, fixing computer points with suitable size GI box with modular plate and cover in front including providing and fixing 3 No. 5 amp 3 pin modular socket under the table and controlled by 1 No. 5 amp modular switch with indicator above the table in seprate GI box with modular plate & cover, connection end terminations with suitable size of glands etc. complete	70	Each		
2	Supply all materials receiving, storing, handling, fixing computer points with suitable size GI box with modular plate and cover in front including providing and fixing 2 no. 15 amp 5 pin modular socket controlled by 1 no. 15 amp modular switch with indicator, connection end terminations with suitable size of glands etc. complete as reqd.	20	each		
3	AC POINT				
3a	Supply and fixing 25 Amps 3-pin modular socket with 25 Amp one way switch with indicator (near AC indoor unit) housed in manufacturers MS powder coated box to be concealed in wall including Wiring using 2R 6.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm MS Steel conduit to be laid in floor, partitions, etc complete with all accessories. (for cassette unit AC units) -(from Stabilzer to IDU)Supply.	12	no.		
3b	Supply and fixing 25 Amp - 3 pin metal clad socket with plug controlled by a 25 Amp SP MCB (for Ac wall mounted stabilizers) housed in manufacturers MS powder coated box to be concealed in wall including Wiring using 2R 6.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm MS Steel conduit to be laid in floor, partitions, etc complete with all accessories. (for casstte AC units) from AC DB to Stablizer	12	no.		
3c	Supply and fixing 20A 3-pin modular socket with 20A one way switch with indicator (near AC indoor unit) housed in manufacturers MS powder coated box to be concealed in wall including Wiring using 2R 4.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm MS Steel conduit to be laid in floor, partitions, etc complete with all accessories. (for split AC units) - (from Stabilzer to IDU)Supply (2 Nos for ATM).	6	no.		
3d	Supply and fixing 20A - 3 pin metal clad socket with plug controlled by a 20A SP MCB (for Ac wall mounted stabilizers) housed in manufacturers MS powder coated box to be concealed in wall including Wiring using 2R 4.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm MS Steel conduit to be laid in floor, partitions, etc complete with all accessories. (for split AC units) from AC DB to Stablizer (2 Nos for ATM)	6	no.		
4	Extension from the nearest ceiling points with 2x1.5 sq.mm.+ 0.75sq.mm PVC insulated copper conductor FRLS wire in suitable dia MS Steel conduit in recess conduit wiring system for wall fan points with 5Amp. modular switches & sockets as per requirement and filling chasis etc. complete as read.	10	no.		
5	Supply, installation, testing & commissioning of factory fabricated distribution board rust inhibited, powder coated sheet sheet fabricated comprising of incoming & outgoing isolator & M.C.B's neutral link or neutral bus,top and bottom detachable entry earthing bolts interconnection and grouting bolts etc complete as reqd. as per details below:-				

a)	6 way MCBDB comprising of 1 no. 63 amp isolator and 4 no. 6/10amp MCBs etc. complete as reqd.	2	Each		
b)	8 way MCBDB double door in recessed wall including cutting of wall and making good the damages comprising of 1no. 63amp isolator and 6no. 6/10amp MCBs etc. complete as reqd.	4	Each		
c)	12 way MCBDB double door in recessed wall including cutting of wall and making good the damages comprising of 1no. 63amp isolator and 10no. 6/10amp MCBs etc. complete as reqd. (For Banking Hall)	4	Each		
d)	4 way TPDB double door comprising of 1 no. incoming 100 amp 4P isolator & 12 nos. 6/10Amp SPMCB (For Lighting and raw power distribution)	4	Each		
e)	4 way TPDB double door comprising of 1 no. incoming 100 amp isolator & 6 nos. 32 DPMCB (For AC's distribution)	4	Each		
PANELS & CABLES					
6	Providing & fixing 3 No. 200 amp kitkats (fuse carrier & base) with 1 no. neutral link on suitable size of backalite sheet of thickness not less than 6 mm etc. complete as reqd.	2	job		
7	SITC of panel fabricated with 16 S.W.G.M.S. sheet. The panel shall be free standing type totally enclosed dust & vermin proof construction with rubber gaskets. The floor mounting panel shall have ISMC mounting channels, G.I. earth bus bar, bus bar chamber cable alleys interconnections with solid bar/PVC insulated copper conductor as per requirement, and suitable supports of bus bars. The panel shall be painted with 2 coats of enamel paint (grey shade)over the primer and shall also be provided with designation of incoming & outgoing feeder as per details below:-				
INCOMING					
a)	1 no. MCCB breaking capacity 25KA 160 amp- 4P				
b)	1 set of 300 amp 4 strips aluminium bus bar chamber				
c)	1 no. 0-500V Digital Voltmeter & Digital Ammeter with one set of CTs (3no.) with CT ratio 200/5 A with LED type indication lamps with protection fuses in separate compartment				
OUTGOING					
a)	1 no MCCB breaking capacity 18 KA 125 amp 4P				
b)	5 no MCCB breaking capacity 10 KA 100 amp 3P with suitable neutral link	1	set		
8	Supply, installation, testing & commissioning of PVC insulated PVC sheathed armored cable of 1100 V (IS-1554 part I) and fixing of cable on wall with suitable size of clamps/ saddles or laid in floor/recess wall including cutting of floor/wall and making good the damages etc. complete as reqd. of following sizes:- (Make: Havelles/KEI/ECKO/RR Cable only)				
a)	3.5 x 90 sq.mm. aluminium conductor with 2 no. 8 SWG G.I. wire	15	Per mt.		
b)	3.5 x 75 sq.mm. aluminium conductor with 2 no. 8 SWG G.I. wire	20	Per mt.		
c)	3.5 x 50 sq.mm. aluminium conductor with 2 no. 8 SWG G.I. wire	35	Per mt.		
d)	3.5 x 25 sq.mm. aluminium conductor with 2 no. 8 SWG G.I. wire	175	Per mt.		
e)	3x6 sq.mm. Copper conductor with 1 no. 8 S.W.G. GI wire (for UPS DB's only)	150	per mtr.		
f)	3 x 2.5 sq.mm. insulated copper conductor	285	Per mt.		
9	End termination with Brass compression glands including providing lugs/ferruls and making necessary connections etc. complete as reqd. of following sizes:-				
a)	3.5 x 35 sq.mm. aluminium conductor	15	Each		
b)	3.5x25 sq.mm. aluminium conductor	10	Each		
c)	3x6 sq.mm. Copper conductor	15	Each		
d)	3 x 2.5 sq.mm. insulated copper conductor	25	Each		
10	Providing & fixing suitable size of angle iron frame suitable for installation on wall/floor including grouting of frame & painting etc. complete as reqd. comprising of following:-				

a)	1 No. 4 pole 200 amp capacity changeover switch	2	job		
	UPS DISTRIBUTION SYSTEM				
11	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 on wall etc complete as reqd. as per details below :-				
a)	4 way DB comprising of 2 no. 63 amp DPMCB (UPS out put)	3	each		
b)	4 way TPNCB double door comprising of 1 no. incoming 100 amp MCB & 6 nos. 32 DPMCB (UPS input)	3	Each		
12	Providing and laying following sizes of PVC insulated copper conductor flexible wire of 1100V in flexible/solid MS Steel conduit etc. including making necessary connection complete as reqd.				
a)	2x6 sq.mm with 1.5 sq. mm copper PVC insulated earth wire (For UPS input & output connections)	10	per mtr.		
13	Earth Box: Providing and fixing suitable size of MS box fabricated with 16 S.W.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 5mm Bakelite sheet on base connector strip and painting of box etc complete as reqd	1	job		
14	Point Wiring				
	Supply all material, receiving, storing, fixing, laying wiring & testing the same for light, ceiling fan, exhaust fan, 6A socket; starting from the point control box to out let; using 1.5 sqmm copper conductor PVC insulated 1100V grade wiring cable in concealed system using 20/25/32 mm ISI marked MS Steel conduit including all conduit accessories like conduit bends, tees, draw boxes, fan hooks etc., where ever required, together with wiring accessories such as flush type modular & flush type sockets, point control boxes, PVC bushes for conduit ends, batten holders, chrome plated brass screws including 1 sqmm copper PVC insulated earth wire, identification ferrules at either ends, complete in all respect. Conduit being concealed either in ceiling/ wall chase or on surface, including making & filling chases with cement mortar & painting the surface conduit etc. complete as reqd. Rates include providing & fixing modular switches & sockets with switch boxes and plate etc. complete (Rates include 3x2.5 sq.mm copper conductor PVC insulated wiring laid in PVC pipe for circuit wiring).				
a)	1 light by 1 switch	60	Each		
b)	2 light by 1 switch	65	Each		
c)	3 light by 1 switch	30	Each		
d)	4 light by 1 switch	1	Each		
e)	Ceiling fan point with step type electronic regulator	10	Each		
f)	Same as above, but for exhaust fan excluding regulator.	10	Each		
g	Same as above 5A Point in the switchboard itself. (for branch 7 No & ATM 1 No)	20	Each		
h	same as above Wiring for call-bell point including buzzer	6	Each		
i	Wiring (2x2.5mmsq+1x1.5mmsq from power DBs) for independant 6A multi pin socket along with 6A modular type switches housed in painted MS box (upto 3 independent plug points can be taken in one circuit). For Fan	45	Each		

j	Supply and installation of modular type 2 nos 6A & multi pin sockets with 2 nos 6 Amp one way switch housed in MS box to be fixed in partitions or concealed in wall. The box shall be painted with 2 coats of enamel paint over a coat of red oxide primer including wiring for Raw power socket outlet using 2 R runs of 2.50 Sqmm and single run of 1.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 20mm MS Steel conduit to be laid in floor, partitions, etc. complete with all accessories (looping 2 sets of 2x6A socket outlet in one circuit- from DB) (Raw power). for counter	50	Each		
k	Supply and installation modular type 16A, 5-pin socket with 16A one way switch housed in MS box to be fixed in partitions or concealed in wall. The box shall be painted with 2 coats of enamel paint over a coat of red oxide primer , the rate shall include wiring fusing 2R 4.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm MS Steel conduit to be laid in floor, partitions, etc complete with all accessories (for line printer : or optional).(upto 2 independent plug points can be taken in one circuit)	20	Each		
15	EARTHING				
a)	a) Supply & fix copper plate earth station with 600x600x3mm thick copper plate including all accessories such as watering pipe & funnel and providing masonry enclosure at top with cover plate i/c excavation of pit, supplying & filling of salt charcoal, refilling of pit etc complete as reqd as per IS 3043-1987. The voltage between neutral & earth must be below 1 volt.	4	set		
b)	b) Supply & fix G.I. plate earth station with 600x600x6mm thick G.I. plate including all accessories such as watering pipe & funnel and providing masonry enclosure at top with cover plate i/c excavation of pit, supplying & filling of salt charcoal, refilling of pit etc complete as reqd as per IS 3043-1987	1	set		
16	a) Supplying, fixing & termination of 20x3mm copper strip with earth station below ground level etc complete as reqd.	35	mtr.		
	b) Supplying, fixing & termination of 32x6mm G.I. strip with earth station below ground level and on wall saddle etc complete as reqd.	50	mtr.		
17	a) Providing & fixing 8 S.W.G copper earth wire on surface or in recess for loopearthing etc.as reqd.	35	mtr.		
	b) Providing & fixing 8 S.W.G G.I. earth wire on surface or in recess for loopearthing etc.as reqd.	60	mtr.		
18	Supply & laying following dia 2 mm in thickness PVC pipe under floor or in recessed walls from earth electrode to UPS room for computer dedicated earthing and electrical panels, etc. making good the damages etc. wherever reqd.				
a)	25 mm	30	mtr.		
	TELEPHONE				
19	Wiring for telephone points with 0.6 mm dia 2 pair insulated annealed tinned electrolatic copper conductor in 2 mm thick 25 mm dia ISI marked MS Steel conduit complete with accessories such as bends, junction boxes etc. with suitable size of PVC box modular plate and cover in front on surface or in recess including providing and fixing modular type telephone socket outlet and making necessary connections etc. complete as reqd.	50	no.		
20	Tag Block : Supply, Providing & installing 20 pair PVC Tag Block in hinged type complete as reqd.	2	no.		
DATA CABLING WORK					

21	Data cabling work for computer networking starting from mounting rack at suitable position of banking hall with UTP CAT-6e LAN Data cable in 2mm thick 25 mm dia ISI mark MS Steel 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., testing and ferruling (D-Link/MOLEX/AMP/COMMSCOPE). Note: maximum 6 no. data cable must be run in one PVC pipe.	50.00	no.		
22	supply, installation, testing and commissioning of 24-port Patch Panel	4.00	no.		
23	supply, installation, testing and commissioning of mounted rack 15" hight made of powder coated MS sheet	4.00	no.		
24	supply, installation, testing and commissioning of factory manufactured CAT-6e patch chord complete with 2 no. connectors etc. complete as reqd.				
a)	1 mtr. long	50.00	no.		
b)	2 mtr. long	50.00	no.		
SUPPLY & INSTALATION (S/I/T/C) OF FANS & FIXTURES					
25	Supply, Installation, testing and commissioning of 36/37 watt LED Light fitting complete including necessary connection from 2x1.5sq.mm copper wire in ceiling etc. as reqd. (Philips Cat no. RC375B LED30S-6500K or equivalent of Wipro / Baijai)	60	no.		
26	Supply, Installation, testing and commissioning of 36/37 watt LED Light fitting complete including necessary connection from 2x1.5sq.mm copper wire in ceiling etc. as reqd. (Wipro LM35-381-XXX-57-CT TZ LED, Power 28W, CCT(K) 5700 or equivalent of Wipro / Bajaj)	4	no.		
27	Supply, Installation, testing and commissioning of recess down lighter with assembly complete with 15w LED including necessary connection from 2x1.5sq.mm copper wire in ceiling etc. as reqd.. (Philips Cat no. DN172B/12S-6500K 15Watt or equivalent of Wipro / Bajaj)	142	no.		
28	Supply, Installation, testing and commissioning of 400 mm sweep wall fan etc. complete as reqd. (M/s Crompton High Flo or equivalent of Khaitan / Baijai)	35	no.		
29	Supply, Installation, testing and commissioning of 21 watt LED Batten including necessary connection from 2x1.5sq.mm copper wire in ceiling etc. as reqd (M/s Phillips Cat. No.BN 021C LED20S PSU CDL or equivalent of Wipro / Bajaj)	45	no.		
30	Supply, Installation, testing and commissioning 4.5/5watt LED Strip light for cove with driver(M/s Phillips /Wipro / Bajaj Complete in all	350	mtr		
31	Supply, Installation, testing and commissioning of 56" sweep ceiling fans complete with regulator, hanging shackle & suitable down rod as per site conditioning complete as reqd. (M/s Crompton high breeze or equivalent of USHA / Bajaj)	10	no.		
32	Supply, Installation, testing and commissioning of 300 mm exhaust fans complete with self opening louvers/shutters etc. complete with suitable wooden/iron frame as reqd. (M/s Crompton Cross air or equivalent of USHA / Baijai)	10	no.		
TOTAL					
GST @ %					
TOTAL INCLUDING GST					
Note: Only two UPS computer points are to be provided on one circuit. Independent circuit for Raw power plug and A.C point is to be provided starting from MCB distribution Box					