

**BILL OF QUANTITIES / ESTIMATE FOR ELECTRICAL WORK OF  
RAH, MATHURA.**

S.NO	Description of items	Quantity	Unit	Rate	Amount in RS
1	<b>Light &amp; Fan point</b>				
	Supply and fixing of light & Fan points with 2Nos. of 1.00 Sq. mm PVC insulated copper Conductor cable in Pvc Conduit and PVC accessories like bend, J- Box, MS box, suitable sheet, 5Amp. One way switch modular type plate and accessories (shocket 5 pin 6 Amp for light plug point) fixing the pipe and with chasing of wall and making it good with cement mortar 1:5. Some points may require ceiling rose or baton holder with 2 nos. of 2.50 sqmm and one no. of 1.0 sqmm copper conductor cable from L & F DB to switch board as submain wiring complete in all respect including connection, testing and commissioning etc. complete.	47	No.s		
2	<b>Power point</b>				
	Supply and fixing of power points with MS Box, sheet and 16 Amp. Switch & 6A switch modular type plate and accessories and shocket 1 no. 16A & 1 no. 6A making with chasing of wall and making it good with cement mortar 1:5, with 2 nos. of 2.50 sqmm and one no. of 1.0 sqmm copper conductor cable from DB to power point as submain wiring complete in all respect including connection and testing, PVC conduit etc.				
a)	Primary point	9	No.s		
3	<b>Telephone point</b>				
	Supply and Fixing 1 No. of Telephone shocket moduder type with MS Box and suitable sheet, PVC conduits and PVC accessories including chasing of walls and making it good with cement mortar 1:5 including one no, of 3 pair telephone wire with connection and testing etc. complete. Item shall include wiring with RJ11 socket from source to RAH electrical panel room.	8	No.s		
4	<b>UPS point</b>				

	Supply and Fixing UPS, output terminal Box with modular type 1 No. of 16 Amp 6 pin socket and 2 No.s of 6 Amp. 5 pin shocket, 1 No. of 6 Amp. Switch with suitable sheet and MS box (PVC Box) making with chassing of walls and making it good with cement mortor including 2 nos. of 2.50 sqmm and one no. of 1.0 sqmm copper conductor cable from DB to UPS point as submain wiring connetction, testing etc. complete.The item shall also include the supply and fixing of conduit, etc. wherever chasing not possible.				
a)	Primary point	11	No.s		
	<b>Wiring</b>				
5	Supply and fixing of <b>2 No.s of 2.50 Sq. mm one no. of 0.75 sqmm PVC insulated copper conductor wires</b> in and including PVC conduit fixing on walls or chassing the walls and making it good with cement mortar of 1:5 ratio including Connecting ,testing etc. compete for glow sign board etc.	25	Rmt.		
6	Supply and fixing of <b>2 No.s 6.0 Sq. mm and 1 No. of 2.50 Sq mm PVC insulated copper conductor wires</b> in and including PVC conduit fixing on walls or chassing the walls and making it good with cement mortar of 1:5 ratio including Connecting ,testing etc. compete for Light & fan DB circuits, UPS incomer wiring, main connection wiring etc.complete.	55	Rmt.		
7	Supply ,fixing ,testing, commissioning of PVC insulated copper conductor 4x10.0 sqmm. Industrial cable with end to end connection from Meter to panel and panel to TPN DB.	60	Rmt.		
	<b>Distribution Board (All MCB's shall be C-curve)</b>				
8	Supply and Fixing of 12 <b>way SPN DB</b> MS painted factory fabricated with 1 No. of 32 Amp DP MCB and 10 No.s of 6 - 32 Amp SP MCB complete with connection , testing,complete for UPS out put circuits.	1	No.s		
9	Supply and Fixing 2 way DB with 1 No.s of <b>40Amp. DP MCB</b> for UPS incommer complete with connection and testing etc.	2	No		
10	Supply , fixing, of 2 Nos. of <b>6 to 10 Amp. SP MCB</b> with 2 way SPN DB for glow sign board and out side general ligh.	1	No.s		
11	Supply and fixing of <b>4 way SPN DB</b> with 4 No.s of SP MCB for CC camera point, rack point etc.	1	Nos		

12	Supply, fixing, testing and commissioning of <b>4 way TPN MCB</b> DB factory fabricated with 12 Nos. of 6-32 Amp SP MCB and 1 Nos. of 63 Amp. TPN MCB for AC, L&F, Power points.	3	Nos		
	<b>Fixture &amp; Fittings</b>				
13	Supply , fixing, testing and commissioning of <b>1200 mm sweep ceiling fan</b> of crompton Grieves make , (high speed modle, Al. blade), 70 watts input power, 370 RPM, air delevery of 230CuM/Min with socket step type regulator etc. complete.(fan rod size as per site requirement )	3	No.s		
14	Same as above but <b>900mm ceiling fan.</b>	1	No.s		
15	Supply & fixing of <b>7 watt. LED</b> bulb of approved make with batten holder.	5	No		
16	Supply , fixing, testing and commissioning of <b>1 x 18 watt surface mounted LED Light Fitting</b> with 1 No. of complete. The item shall include hanging arrangements with all accessories, if required.	7	No.s		
17	Supply , fixing, testing and commissioning of 600mm X 600mm 40 watt recessed type high performance decorative <b>LED luminaries</b> . (PHILIPS Cat Ref.RC380B LED36S -6500 G5 L60 W60 PSU or equivalant).	18	No.s		
18	Supply, fixing, testing and commissioning of <b>400 mm sweep wall fan</b> of crompton Grieves make (hi-flow wave module), 50 watts input power, 1300 RPM, air delevery of 60 CuM/Min.	8	No.s		
19	Supply , fixing, testing and commissioning of <b>300mm dia exhaust fans.</b>	3	No.s		
20	Supply , fixing, testing 9 Watt LED down lighter with electronic driver.	15	No.s		
	<b>Earthing</b>				
21	Supply , fixing, testing and commissioning of <b>Earthing electrode</b> with suitable digging and back fill compound ( use 50 L Ishan make electrode & back fill compound ) 1 for Neutral earth of UPS 1 for computer Earthing and 1 for Branch Body Earth.(Using 2 Nos. of existing earthing).	3	No.s		
22	Supply and fixing of <b>25X3 MM G.I. strip</b> from earth pit to Main board.	30	RMT		

23	<b>Main panel</b> :- Designing , manufacturing , installation , testing & commissioning of cubical type panel made from 16 SWG CRCA sheat ( with MS chanel ) for grouting on walls/ floor ) complete with MCCBS , MCBs , Meter etc. complete in all respect , insulated bus bar with heat shrinkable PVS sleeve in suitable bus bar chamber , wiring name plate, danger plate , earth bus bar etc . comprasing of compartment with hinged doors and rubber gas kit , bus bar chamber with bolted doors and rubber gas kit etc. the panel shall be of dust and vermin proof construction and to be painted primer and smoke grey paint in two coats . The panel should be comprises of following - ( Degree of protection IP - 54 )				
	<b>INCOMER</b>				
	100 Amp 4 pole MCCB with shunt trip coil	1			
	Voltameter with push switch	1			
	R - Y - B phase indicator set	1			
	<b>OUTGOING</b>				
	200 amp. Electrolytic alumium bus bar	1			
	200 amp , 4 pole on load change over for branch L&F + power point, branch UPS	1			
	63 amp TPN MCB	4			
	40 AMP D P MCB	2			
	Complete one job as per above description	1	Job		
	<b>Networking</b>				
24	Supply, fixing, connecting & testing of <b>16 port ethernet switch</b> D-link make.	1	No.s		
25	Supply, fixing, testing and commissioning of <b>patch cord</b> 2.0 M D- link make.	12	Nos		
26	Supply, fixing, testing and commissioning of 1 No. of <b>Info. Outlet box</b> with PVC box, surface plate and RJ45 connector along with Cat 6E cable in suitable PVC conduits from networking rack to I.O.	13	Nos		
27	Supply, fixing, testing commissioning of 600mm depth 12 <b>U rack</b> with all accessories like power strip, ventilation fan, cable manager, two no.s tray etc complete.	1	Nos		
28	Supply , fixing, testing and commissioning of 2mm thk electrical <b>insulation rubber mat</b> of size 1m X 1m.	1	Sq.m		
29	Supply , fixing, testing and commissioning of 3 nos. 100 amp. Fuse cut out with neutral link on wooden board for electrical main & generator each.	2	set		

30	Supply , fixing, testing and commissioning of <b>AC box</b> with socket, Plug top and SPMCB with 2 nos. of 4.00 sqmm and 1 nos. of 2.50 sqmm copper ind. Cable with suitable PVC conduit.	6	No.s		
	Add contingencies @ 5%				
			GST @ 18 %		
			G. TOTAL		
			<b>Say Rs</b>		