

**BOQ FOR ELECTRICAL WORKS OF LCPC AT FIFTH FLOOR OF ADMINISTRATIVE OFFICE BUILDING JABALPUR**

S.No	Description of items	Qty	Unit	Rate	Amount
<b>1</b>	<b>ELECTRICAL WIRING</b>				
	<p>Providing, fixing, testing and commissioning of POINT WIRING of any length for light point/Wall fan point/Exhaust fan point/ Call bell point/ including call bell/ including fan box( if required), 'S' type fan hook etc with 3 X 1.5 Sq.mm(P/N/E) PVC 650V/1100V Grade FRLS WIRE insulated copper conductor single core multi streded wire in 16 SWG(Medium Gauge) stove enamelled rigid steel conduit 20mm/25mm with conduit accessories like bend, junction box etc in concealed/ surface manner as per site requirment with suitable Modular Switches/Sockets with plate and Metal/PVC box,Scaddle, angle bracket (if required), 3 plate ceiling rose/bulb holder etc. The floor/roof/wall junction box shuold be of MS(heavy duty) box of suitable size and covered with Steel finish Steel cover sheet by screw tight and gasket to avoid water/dust insertion. The item includes Circuit wiring from DB to the switch board with 3x2.5 Sq.MM. The above wiring carried out surface or recess in wall/floor/roof should be cutting by cutter/chiesling, replastering, curing, painting with uniform and smooth finish by specilised workman ship and making the surface neat afterwards complete in all respect as per direction of Bank Engg. (EACH Circuit to take NOT MORE than 7-8 points) The conduit/ Flexible conduit/ junction box/metal modular box etc must be joined by gland and check nut at both ends. (each circuit to be controlled by one MCB). The colour code of wire are as under: Phase- Red, Neutral- Black, Earth-Green                      Make of Material for items of BOQ:-                      (i) Modular Type Switch/socket/step electronic fan regulator, plate, box, TV/telephone, bulb holder/3 pin ceiling rose with all accessories:- Lergand/ Anchor(Roma)/MK/ Crabtree                      (ii) MS conduit/PVC conduit with all accessories:- BEC/AKG/NIC/Precision                      (iii) PVC insulated copper wire(FR) 650V/1100 V grade:- Finolex/RR cable/ Havells</p>				
<b>a</b>	Providing and fixing of point wiring with above specifications. One light point controlled by one switch.	50	Nos.		
<b>b</b>	Providing and fixing of point wiring with same above specifications. Two light points to be controlled by one switch.	15	Nos		
<b>c</b>	Providing and fixing of ceiling fan point controlled as under (i) one 6 amp switch (ii) one no stepped electronic regulator of two module type.	8	Nos.		
<b>d</b>	providing and fixing 6 Amps Plug Points with same specs as above and install along with same light switchboard	15	Nos		
<b>e.</b>	Master switch of <b>16 Amps(Only Grey/Golden/Wooden colour other than white colour)</b> to install alongwith same light switch board to control all light as a master switch ON/OFF in each switch board	8	Nos		
<b>2</b>	<b>6 AMP. POINTS ON SEPARATE BOARD</b> :Supply,fixing,testing and commissioning of 1 No 6 A Multi Socket with 1No. 6 A switch (Modular type) with cover plate , sheet steel box / PVC modular box etc on surface / concealed manner I/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as per site requirement and as directed. (Minimum two and Maximum three points are loop with one circuit as mentioned beolw)	20	Nos		
<b>3</b>	<b>Power Wring (6 / 16 AMP. POWER POINTS).</b> Supply, fixing, testing and commissioning of 1 No 16 A switch & 1 No.six pin 6/16 Amp. Multi Socket (Modular Type) with cover plate , sheet steel box etc on surface / concealed manner I/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as per site requirement and as directed. (Maximum two points are loop with one circuit as mentioned below)	25	Nos		
<b>4</b>	<b>SPECIAL POINTS:(For Computers)</b> Supply, fixing, testing and commissioning of following Modular type switch socket with cover plate, PVC modular box on Surface / sheet steel box in concealed manner I/c electrical connections and making good all the damages, painting, cleaning the site etc. complete including all accessories as per site requirement and as directed. 2 Nos. 6 A Switch + 3 Nos. 6 A, 3 pin Socket (Minimum two and Maximum three points are loop with one circuit as mentioned beolw)	25	Nos		

5	<b>AC/Geyser Point (Single Phase).</b> Supply, Installation, Testing and commissioning of the surface / recess mounting A.C. / GEYSER power point with the followings : Metra Plug and Socket DBs with one Nos 20 Amp SP MCB, 20 Amp plug and socket with complete Enclosur plate and box.- 1 set i/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as required as per site requirement and as directed by Bank Engineer. <b>OR</b> Modular 32A DP 1 way switch with plate & box 1 set. + 25A & 10A twin socket (Only one point is connected with one circuit as mentioned below)	12	Nos		
6	<b>CIRCUIT WIRING :(FRLS WIRE)</b> Supply , installation, testing & commissioning of FRLS circuit wiring measured in numbers with suitable size of MS conduit 1.6 mm thick and 25mm dia. The wiring in MS conduit is as per IS code. The average length of wiring around between(25-30) Mtr.				
A	3 X 2.5 sqmm ( For UPS Circuit/6 amp Separate Board ) in suitable size of 16 SWG (MMS) steel conduit as per IS code.	26	Nos		
B	3 X 4.0 sqmm ( For AC/Power Circuit ) in suitable size of 16 SWG (MMS) steel conduit as per IS code.	20	Nos		
7	<b>UPS OUTGOING &amp; OTHER FRLS WIRING, As Per Requirement.</b>				
A	3 X 2.5 Sqmm copper multistread FRLS wire in suitable size of 16 SWG (MMS) steel conduit.	80	R.Mtr		
8	<b>DISTRIBUTION BOARDS</b>				
	<b>All MCB to be "C" series</b>				
A	Providing and fixing 6 way TPN double door DB for LIGHT /POWER POINTS with 63 Amp TPN , controlling 18 Nos. 10/16/32 Amps SPMCBs. & Complete.	1	Nos		
B	Providing and fixing (12) way SPDB double door type For UPS points with 1x32 Amps DP, controlling 10 Nos, 16 AMP SPMCB	2	Nos.		
C	Providing and fixing (4) way TPN double door type For UPS INPUT with 1x63 Amps TPNand 63 amp DP MCB- 3 Nos & 3 Nos, 32 amp SP MCB complete (E-lobby/UPS Output)	2	Nos.		
9	<b>CABLES</b>				
	Supplying, unloading, storage, laying, testing and commissioning of PVC/XLPE insulated (Heavy Duty) Al/Cu conductor armoured cable suitable for working voltage upto and including 1100 V grade, laid and tied on existing overhead cable trays, or laid and tied over MS supports in masonry trenches with copper/al cable lugs, single compression brass cable glands, tapping, crimping etc. as required and all cables run with double run( <b>2 No.</b> ) of <b>GI wire of 8 SWG size</b> .The size of cables are as under:- Make of Material:- (i) PVC/XLPC Armoured cable:- Finolex, Havells, RR cable, CCI(Cable Corp. of India) (ii) Cable Termination:- Dowells, Comet				
A	3.5 X 50 Sq.mm XLPE. Al. armoured Cable(AC VTPN & BUS BARS)/Main cable	80	Mtr		
B	4X 16 Sq.mm XLPE.Al.armoured Cable (LIGHT/ UPS)	60	Mtr		
10	<b>DATA CABLING FOR LAN</b>				
A	Providing, fixing, testing and commissioning of all nodes of four pair UTP CAT 6 LAN cables length upto <b>30 meter length</b> or less as per site condition in suitable size 20/25 mm dia, 16 SWG wall thickness rigid PVC conduit with conduit accessories like bend/junction box/ fan box etc on surface/recessed manner and making good all the damages, painting, cleaning the site etc complete as required as per site condition and as directed as required. Junction box should be covered with Stainless steel plate with screw with gasket for protection of water/dust. Providing, fixing, testing and commissioning of modular type Information Outlets with suitable size of MS/PVC modular boxes complete, all accessories with insulation displacement connectors etc suitable for CAT 6 UTP cabling with RJ-45 socket with testing and commissioning of STP cabling with scanner for all the nodes/switches/jack panel complete (Each point/circuit/cable from both load and source end to be marked with ferrules.) Make of Material:- (i) Data Cable, Cat 6 cable, Switch, Jack panel, Rack, Patch cords & Other accessories:- D-Link, Legrand	35	Nos		
B	Providing and fixing Patch Panels 24 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)	1	Nos		
C	Providing and fixing Patch Panels 16 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)	1	Nos		

D	Providing, fixing, testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.	80	Mtr		
<b>Description of light /fan fixture</b>					
11	<b>LED LUMINAIRES:- 2' x2' (FULL GLOW TYPE)</b> LED light fittings (600 X600mm) dimension suitable for grid/gypsum ceiling complete with its electronic driver as required per instruction of Bank's Model No are as under:- PHILIPS:- RC380B G2 LED 355-6500 PSU OD WH LED ( <b>FULLGLOW</b> ) WIPRO:- CRCO1ORO 38 HP57 HAVELLS:- LHECDIL7IL1W036 ( <b>Edge- Lit</b> ) CG:- LCTAR3-40-CDL	70	Nos		
12	<b>LED DOWN LIGHTER:</b> 15 Watt, recessed mounted circular down lighter , 6" dimension with complete its electronic driver are as under:- PHILIPS:- GREENLED-DN193B LED-12S-6500 PSU WIPRO:- IRIS LED LD 71-121-XXX-50-XX HAVELLS:- LHEBJNP ZPZ 1W 015(ENDURA LOW DEPTH) CG:- LC DD-15-CDL,	45	Nos		
13	<b>CEILING FAN: FIVE STAR RATING BLDC FAN</b> Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM (tolerance as per IS : 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required. Each, White Make:CG/USHA/ ORIENT/HAVELLS	6	Nos		
<b>TOTAL FOR ELECTRICAL WORKS</b>					