

**BILL OF QUANTITIES OF ELECTRICAL WORKS FOR INDIAN BANK AT NEW SHIFTING
BRANCH AND ATM-PALLAR, DISTT- DAMOH (M.P.)**

ELECTRICAL WORK

S. No.	PARTICULARS	UNIT	QTY	RATE	AMOUNT
1	Providing and fixing, testing and commissioning for point wiring two nos. 1.55 sq. mm/2.5 sq.mm or 4.0 sq.mm PVC insulated single core stranded copper conductor wire 1100 volt grade (for Ph&N) and one nos. 1.0 sq. mm/ 1.5 sq. mm PVC insulated single core stranded copper conductor wire 440 volt grade, for earth wire 1.6 mm th. 25 mm dia BEC / NIC / AKG make PVC conduit pipes. All wires are to be ISI mark approved / specified make Anchor/ Finolex / Havells complete with all drops upto boards, stapples, accessories and hardware etc. Installing the conduit in slabs, wall etc. The point shall include modular type switches of MK Anchor, Roma, Crab tree make as approved / specified in required combination including electronic regulator, 6 ASP control switch 3-plate ceiling rose, angle or straight holder adequate size to mount control switches for lights, fan sockets. Sockets for half points and ceiling fan regulator. rate must also include the cost of circuit wiring with 2x2.5 sqmm+1x1.5 sqmm				
a	Light points. & exhaust fan points	No.	56		
b	Fan with regulator (ceiling + bracket) (2x1.50 sq.mm + 1x1.5 sq.mm)	No.	1		
c	Call bell points inclusive of call bell .	No.	1		
e	16 Amp 3/5 pin point (2x2.5 sq.mm +1x1.5 sqmm)	No.	15		
f	Ac point -supply instalation of AC point with following item in surface / concealed manner 32 A D.P. 1 way switch with neon, plate & box 20 amp. 10 amp. Twinsocket with plate & box including 2x4.0 + 1x1.5 sqmm cu. Wire along with copper wiring from indoor to out door unit with pvc conduit etc complete.	No.	5		
g	Providing, supplying and installation the concealed (Complete with replastering and painting)25mm dia Drain pipe from AC unit inside to branch to the outdoor of premises as instructions by Architect – Make Finolax of drain pipe etc.	R.mtr.	61		
2	Telephone Socket Point -Supplying, fixing and testing of telephone socket point wiring with two line telephone wire of approved Anchor Havells/Finolex make in 1.6 mm th 1" dia PVC conduit pipe including double line tel-Jack (modular type) on the switch board.	No.	3		
	10 pair tag block	No.	1		
3	UPS POINTS: Wiring for computer terminal points with 2x1.5Sqmm + 1x1.5 Sqmm PVC insulated copper conductor recessed in wall/under counter in PVC pipe/flexible pipe/casing capping as required. Rate inclusive of 3 nos. 6 amp switch & socket (5pin) (modular) with fuse & indicator i/c of box, base plate & cover plate, making all connections complete. (Average length 15M)	No	10		
4	TIMER				

A	providing & installation of electronic digital no/off timer 2 stage for Ac beaing upto 3000 watt with , 40 AMP DPMCB in	No.	1		
B	Providing and installation of electronic digital no/off timer, load bearing up to 800 watt for glow sign board with 20Amp pp MCB in enclosure	No.	1		
C	M.S. STAND				
	MS-STAND (POWDER COATED) -Providing and fixing of lockable caging for outdoor unit grouted on wall or on roof with open able shutter made of 10 X 10 mm MS square bars placed vertically @ 5" c/c welded with 40 X 3 mm MS flat all- round. The frame shall be of angle 35mm*35mm and it shall be fixed to wall or roof with proper MS bracket to tackle the weight of outdoor unit. Item includes all necessary hardware, priming coat, synthetic enamel paint, hanger, clamps other accessories etc. All complete as per approval and instructions of the employer. Size shall be adequate for AC outdoor size & sufficient space around the outdoor suitable for servicing purpose for Outdoor unit.	No	5		
D	Stabilizer shall be Automatic version with copper coil transformer and the voltage selection range shall be minimum depending on lowest peak recorded average in a month. Precise output voltage range (130V-170V to 240V -270 V). Ensure the rating of Stabilizer shall be in accordance with max rated power of ACs considering instantaneous peak load fluctuation. Providing and fixing Stabilizer with 3-4 step relay and input voltage range of 130-270 V and output to be 230-240 V (Blue bird/ Logic state/ Inline/ V-Gaurd/Equivalent Reputed Make) (copper winding). 5 KVA (For 1.5/ 2.0 TR Split AC)	No	5		
5	Inverter Wiring (From Inverter at UPS room to the mentioned points) - using 2*2.5 + 1*2.5 Sq.mm Copper Conductor FRLS wires from DB to first 6A, 5 Pin modular socket controlled by one 6A switch and looped to the nearest second point with same 2*2.5 + 1*2.5 Sq.mm copper conductor wires FRLS insulated 1100V grade (max 3 points per circuit). 1850 inverter = 1600 watt for 125 va tubular battery. 36 wx4 no = panal light 9wx6no= Down lighter Wall fan - 40wx4 no For 8 hours	Job	1		
6	Supplying and laying of Extra copper refrigerant piping with nitrile rubber pipe insulation, both of size as specified by the manufacturer suitable for 1.0 TR/ 1.5/2.0 TR Split type AC (From Indoor to outdoor Units) Beyond 10 M.	Rm	60		
7	Ceiling Fan -Supply and fixing of the 48 inch 3 blades Ceiling fan of Orient/ Crompton greaves / Philips make, including fixing & as per all respect etc. including connection with all necessary materials as required.	No.	1		

8	Wall Mounted Fan -Supplying, erecting and testing of approved / specified Wall mounted fans (METAL BODY) 400 mm dia. make As specified in tender document or approved by concerned office in charges, speed regulators etc. 230-250 volts with connections, raw bolts/anchor hole fastener completely finished make of Philips or Usha or Crompton greaves as required.	No.	12		
9	Exhaust Fan -Supply and fixing of the 300 mm METAL exhaust fan of Crompton greaves / Philips make, including making hole in the wall for fixing and making up for the civil damages etc. as required. including fixing & as per all respect etc.(2 No's- Toilets + 1 no's-UPS)	No.	4		
9	Supply, installation, testing, & commissioning of lighting fixtures. All fixtures should be complete with all accessories such as lamps, starters, low loss copper chokes, PF improvement capacitors etc. The fixtures should be complete with ball & socket type vibration dampers & all accessories with necessary down rods. Above specification governs all work specified below:				
a	ELECTRICAL FIXTURES & FITTINGS Supply, laying, testing and commissioning of Recessed mounting mirror optics luminaries LED (34 Watt – 4 lamps) of Havells /Philips complete with its electronic driver fittings etc in all manner - size- mm- 2'x2" including fixing & as per all respect etc.	No.	14		
b	Down Light :- P&F recessed mounted down lighters (Wipro: WCP 32218 2 x 18W LED (TC-D)	No.	12		
c	Tube light -Supply and fixing of LED (T-5) 20 W tube 4'-0" make of Crompton greaves / Philips make.	No.	9		
10	Supply and installation of circuit in app. make 1.6 mm thick, 25mm dia PVC pipes and at places where decorum is to be maintained in PVC casings with approved make PVC insulated wire as under. The rate shall be inclusive of all necessary fittings like junction boxes, tees, bends, saddles screws etc complete. PVC pipe to be of BEC/NIC/AKG make and wire of Havel, Anchor Finolex make.				
a	10x4 sq.mm + 1x1.5 sq. mm	Rm	105		
11	Supply and installation and connection of modular type app./ specified switch and socket (ANCHOR-ROMA OR M.K. MAKE) complete with PVC box plate screws and all other accessories. Rate must also include the cost of circuit wiring with 2x2.5 sqmm + 1x1.5 sqmm				
	3 Nos. socket + 2 Nos. switches (6A)	No.	22		
12	LAN- (LOCAL AREA NETWORKING) FOR COMPUTERS :				
a	Supply and Installation of following factory fabricated patch cords (UTP-CAT 6) complete with connectors on both sides.				
	Two Meter length.	Nos.	8		
b	Supply and laying of Four Pair UTP CAT 6 LAN cables in 1 mm thick 20 or 25 mm dia pvc conduit t / Floor trunking with RJ-45 connector. including Supply and fixing of modular type	Nos.	8		

c	Supply, Installation, Testing and Commissioning of the following Rack on existing wall / table / plateform etc i/c fixing of equipment/ accessories etc as required.				
	9 U Rack.	Nos.	1		
13	D-Link Switch :- Providing and fixing at site 24/48 port D link make cat-6 data switch	Job	1		
14	CHEMICAL EARTH STATION (One for branch electrical work & One for UPS system):- Installation, Testing , commissioning of CHEMICAL EARTH STATION Based on Earthing Electrode with inbuilt copper strip/GEL/GAF based. Should have resistance< 1 Ohm and should be < 2V between neutral and earth. Suitable electrode be used as per the site requirements. Earth enhanced compound powder (Gel) with hardener to be provided minimum 20Kg per site/ Back Fill/Site Filled compound (BFC/BSC)- 100 Kg. Earthing Warranty for 5 years. The electrode should be minimum 60mm dia and 3 Meter length.or 80mm dia and 2 Meter length. Dedicated earthing for computer systems, with all respect as per your required specification. Included to above item - Construction of earth pit chamber incl. Necessary brickwork, concrete, plastering S/F of CI cover of size 12" x 12".In addition to above item - Providing and fixing 2 X 8 SWG dia. earth wire in PVC conduit on surface or in recess for loop earthing along with the existing surface/ recess cable as required.	Nos.	2		
15	Supplying and laying 25 x 3mm copper strip direct on wall / in ground with screws and washer including soldering / welding com.	Rm	30		
16	DISTRIBUTION BOARD & MAIN BOARD				
	INCOMER				
16(a)	1 Nos. MCCB 100 Amp. 100 A TPN insulated Aluminum Bus Bar 1 Set+100A TPN A1 bus bar no on load c/ SW 100A 2 Nos. MCB 63A(TPN)	No	1		
16(b)	LDB (4x4 TPDB – double door) I/C 63 A() O/G SP-7 Nos. 10 A, SP-5 Nos-32 A SET AS ABOVE	No	1		
17	U.P.S. DISTRIBUTION BOARD FOR OUTGOING SUPPLY Supply, Installation, Testing and commissioning of the surface / recess mounting following way Double door MCB D.B. Single phase distribution board (Consumer unit) for single phase out going with IP 422 protection incl. The followings accessories – a) 1 No. SPN MCB DB 12 way b) 1 No. 25 amp DP MCB c) 10 Nos. SP MCB 6 amp. Including Electrical connection, earthing, making good all the damages, painting, cleaning the site, etc. complete as per site requirement and as directed.	No	1		

18	Supply & fixing 40 A TPN MCB with enclosure for UPS Incomer	No	1		
				Total	
	SEAL AND SIGNATURE OF CONTRACTOR				
	DATE				