

PRICE BID (PART-II) -ELECTRICAL

NAME OF WORK;ELECTRICAL WORKS FOR UCO BANK , PASCHIM VIHAR BRANCH

S.No.	DESCRIPTION OF WORKS	UNIT	QTY	RATE	AMOUNT
A.	POINTS & WIRING				
1.	LIGHTS POINTS				
1	Wiring for light point/ fan point/ wall fan point/ exhaust fan/ light sockets etc. with 1.5 sq.mm. PVC insulated 1100 V Grade copper conductor (FRLS) wires & 1.5 sq.mm. copper earth wire in concealed/ surface using 16 SWG MS conduits, accessories such as bends, tees, saddles, draw boxes, mounting boxes, inner plates, cover plates, ceiling rose etc. (wherever required) and chromium plates brass screws/ rowel plug etc. The circuit wiring starting from DB to point control box/ switch box using 2 X 2.5 sq.mm PVC insulated 1100 V grade multistranded copper conductor wire & 2.5 sq.mm. PVC insulated earth wire (color code to be used). (Flexible conduit/ elbow not allowed). The conduit to be laid in ceiling with proper clamps/ wall/ floor and filling the chase with cement mortar and finishing the same in original form/ wooden partition/ above false ceiling with proper clamps etc. all complete.				
	(Wherever required as per standard specifications).				
	i) Each circuit shall have independent earth wire.				
	ii) Each point shall be earthed.				
	iii) Circuit wiring is to be included in point wiring rates.				
i	Primary points controlled by one 6 amp. Modular switch.	Nos.	25		
ii	Secondary light points controlled by one 6 amp. Modular switch.	Nos.	40		
iii	One call bell point with ceiling rose/ 6amp. 3 pin socket controlled by one 6 amp. Push Modular switch. With call bell	Nos.	2		
iv	One wall fan/ ceiling/ exhaust fan point with 6 amp 3pin socket controlled by one 6 amp. Modular switch. The switch should be at switchboard level.	Nos.	10		

v	One 5 pin socket controlled by one 6 amp. Modular switch complete assembly includes plate box etc. Dependent	Nos.	5		
vi	Same as serial no 1 but 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).				
a	Primary Point	Nos.	10		
b	Secondary Point looped	Nos.	2		
2	POWER POINTS				
	Same as serial no.1, but wiring for 16 Amp, 6-pin sockets by using 2*4 sq.mm. PVC insulated 1100 V grade copper conductor wire with independent 1* 4.0 sq.mm earth wire from D.B. to first point 1 st socket and 1 st to 2 nd , socket with 2*2.5 sq.mm and 1*2.5 earth wire including providing and fixing of 16 Amp, 6 –pin socket with 16 Amp. Switch. (Modular type switch/ socket/ plate etc. complete assembly) max 2 points per circuit.				
a)	Primary Point	Nos.	6		
b)	Secondary Point	Nos.	2		
3	AC POINTS FOR INDOOR & OUTDOOR UNITS				
3(a)	Same as serial no.1, but wiring for A/C socket by using 2*4 sq.mm. PVC insulated 1100 V grade copper conductor wire and earthing with 1*4.0 sq.mm. PVC insulated 1100 V grade copper conductor wire with modular type AC box (tiny trip type) with socket complete in all respects controlled by 25/32 A SP MCB to be provided near indoor unit. The point starts from DB to stabilizer to the point near the indoor unit including top.	Nos.	8		

4a	<p>COMPUTER POINTS -Wiring with 2x2.5 sq.mm. + 1x2.5 sq.mm. PVC insulated 1100 V grade multi stranded copper conductor wires in 2 mm thick PVC conduit from UPS DB to computer point. Each point to have 3 nos. 6 amps. 5 pin modular type sockets, one 6 amps modular switch with all accessories, inner/ outer plates, metal box etc. and to be fixed on wooden partitions/ by grouting on wall etc. as per requirement at site. The switch should be fixed above the top of counter with indicator and sockets under the counter</p> <p>b) Same as above but looped from the above 1st point to 2nd, point and 2nd point to 3rd point.</p> <p>(Maximum 3 points in a circuit)</p>				
	Primary Points	Nos.	11		
	Secondary Points	Nos.	1		
b	<p>Wiring with 2x2.5 sq.mm + 1x2.5 sq.mm PVC insulated 1100 V grade multi stranded copper conductor wires in 2mmthick PVC conduit from UPS DB to computer point. Each point to have 1 nos. 16 amps 5 pin modular type sockets, 1 No's 16 amps modular switch with all accessories, inner/ outer plates , metal box etc and to be fixed on wooden partitions/ by grouting on wall etc as per requirement at site. The switch should be fixed above the top of counter and sockets under the counter. or as directed by the engineer in charge for the rack supply in PA rack, CCTV</p> <p>b) Same as above but looped from the above 1st point to 2nd point (Maximum 2 points in a circuit)</p>				
	Primary Points	Nos.	10		
	Secondary Points	Nos.	1		
	PART (A) SUB TOTAL				
B.	CONDUITING FOR TELEPHONE, COMPUTER & CONDUITING, WIRING FOR T.V. SYSTEM.				
1.0	TELEPHONE SYSTEM				

1.1	Wiring for VOICE from Jack Panel in data rack to computer workstation with Cat-6 voice cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type. This work includes supply and laying of CAT-6 cable in PVC conduits throughout the length, from the I/O hub to the point.	Nos.	8		
a)	Supplying & fixing 20 pair krone tag block with enclosure.	Nos.	1		
2.0	COMPUTER NETWORKING				
2.1	Wiring for computer networking from Jack Panel in data rack to computer workstation with Cat-6 computer cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type, This work includes supply and laying of CAT-6 cable in PVC conduits throughout the length, from the I/O hub to the point.	Nos.	14		
2.2	Supplying and fixing 9 U (Rack with glass door, opening in the front power panel 1 (horizontal), cable manager 1 lock & key).	Nos.	1		
2.3	Supply, Installation, Testing & Commissioning of 24 port Jack Panel.	Nos.	1		
2.4	Supplying and fixing Patch Cord-1 Meter- (DBPSMounting Cord)	Nos.	14		
2.5	Supplying and fixing Patch Cord-2 Meter-	Nos.	14		
	PART (B) SUB TOTAL				
C.	CABLES, MAINS & SUBMAINS				
1	Supplying all materials and laying/ pulling 1100 volts grade PVC insulated copper conductor wires (FRLS) in MS conduit with all fixing accessories after cutting the floor, wall and the like etc. and plastering the floor level to original. Conduit must be 30 mm below the floor finish level.				
i	2 X 4 sq.mm. + 1 X 4 sq.mm.	RM	60		
ii	2 X 6 sq.mm. + 1 X 6 sq.mm.	RM	30		
iii	p/f junction boxes on floor, with s.s. cover plate	no	10		

v	Supplying, laying, testing & commissioning of 3.5 C X 16 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination accessories, Clamps etc. as required as per specification (Light DB).	RM	5		
	PART (C) SUB TOTAL				
D.	DISTRIBUTION BOARD				
	Supplying, installing, testing & commissioning of surface/recessed mountings, Double door 415 volts TPN MCB distribution board of steel, 1.6 mm thick dust phosphatized and painted, inclusive of 100 amps, tinned copper bus bars, earth bar, common neutral link, din bar for mounting of MCB's detachable gland / knock out plate & with built in loose wire box, and superior make terminal connectors for all incoming and outgoing circuits duly prewired with adequate size of PVC insulated copper wires between the bus bars and the MCB's as well as the incomer and upto the terminal connectors/ neutral link and ready for installation of following ways as required.				
	Use 'B' curve MCB's for lighting & small power circuits, 'C' curve for motor duty i.e. for pumps, AC motors, window and split AC's etc. & 'D' curve for UPS DB's i.e. for computers/ PC's circuit. Main incomer & outgoing circuit MCB's shall be selected accordingly i.e. type B,C & D. Contractor to select the MCB's accordingly as per the nature of the circuit/ load.				
	Each DB shall have separate neutral links of rating not less than 100A for each phase. The main incoming neutral link shall be in addition to three outgoing neutral links and shall be of 125 A.				
	UPS DB's shall have a dedicated Earthing link fixed on insulated supports, which will be in addition to body earth link.				
	All internal inter connecting wiring with in the DB's shall be PVC insulated flexible copper conductor wires of adequate capacity as per the current rating.				
	Inside each DB, a DB chart is to be fixed.				
a	4-way TPN DB (LIGHT DB)	No.	1		
	Incomer:-				
	1 No. 40 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each phase				

	Outgoing:-				
	6 Nos.6/10 Amp (10 KA) SP MCB				
b	4-way TPN DB (Power DB)	No.	2		
	Incomer :-				
	1 No. 63 Amp TPN (10 KA) MCB with 63 A DP RCCB (100 MA) each phase				
	Outgoing :-				
	6 Nos. 10/16/25/32 Amp (10 KA) SP MCB				
c	4-way TPN DB (AC DB)	No.	1		
	Incomer :-				
	1 No. 63 Amp TPN (10 KA) MCB with 63 A DP RCCB (100 MA) each phase				
	Outgoing :-				
	6 Nos. 10/16/25/32 Amp (10 KA) SP MCB				
d	4-way SPN DB with 2 Nos. 40 A (10 KA) DP MCB (For UPS Input)	No.	2		
e	p/f6 way SPN DB with box	NO	1		
	PART (D) SUB TOTAL PART (D) SUB TOTAL				
A]	Main panel Electric -Designing, fabrication, supply, installation, testing and commissioning offront operated cubicle type compartmentalized, front access, free standingon 75MM "[" MS channel, dust and vermin proof (IP 42 degree protection)panel suitable for use at 415V, 3 phase, 4-wire 50Hz system suitable for				
	fault level of required value symmetrical at 415V fabricated from 2mm thickCRCA MS sheets with hinged, gasketted (Metal based neoprene) lockabledoors having structural reinforcement including 3mm thick gland plates ontop and bottom, lifting hooks, GI earth strip of required size with 2 no'searth terminals, 2 no's 230V AC operated 250 mm X 250 mm size axial fansfor exhaust of heat with On-Off toggle switches including 2 coated primerand 2 power coated paint finish of approved shade over metal surfacecleaned and treated with seven tank process complete withinterconnections etc. as per specifications as required. Main panel board ofapproved make (Should be CPRI Approved, Type of Approval as instructedby the concerned office in charge)				

	As per the following specifications, (Part IV - Substation) and IS: 8623 comprising of followings panel mounting switchgears etc. as required, should be CPRI Approved. IS: 8623 comprising of followings panel mounting switchgears etc. as required, should be CPRI Approved. Note: Type of CPRI testing shall be as per Architect/ Bank's instructions. All switchgears shall have provision for entry of cables from the top or bottom through Cable Alley.				
	All live accessible parts shall be shrouded and all equipment shall be fingertouch proof. The busbars insulation shall be with heat shrinkable sleeves SMC/ DMC shrouds and busbar supports shall be used. Padlocking facility shall be provided on all outgoing feeders' doors and switch handles shall be lockable in OFF position.				
	Suitable arrangement shall be made for termination of multiple incoming cables.				
	All KA values indicated shall be ICS breaking capacity				
	GA drawings shall be got approved by concerned office in charge.				
a.	Floor panel shall consist of : -				
	INCOMER				
	1 no. 100 Amp 4P On Load Change over switch with 1 No. 100 Amps, TPN MCCB (25 KA) with extendable rotary handle each thermal over current, instantaneous, Short circuit release, Earth fault.				
	BUSBARS				
	125 amps TPN pole bus bar chamber of suitable length with copper busbars. All bus bars and interconnections shall be of suitable size copper strips.	Set	1		
b.	INDICATING PANEL				
	Digital flush type class-1.0 accuracy multifunction meter showing V, A, PF etc. with 3 Nos. Current Transformers of 125/5A ratio, 15 VA Class-1.0 metering. - 1 sets				
	Red/Green/Amber ON/ OFF/ TRIP indicating lamps with 2A SP MCB backup protection.				

	1 set of three phase indicating lamps along with 2A SP MCB backup protection.				
	Restricted Earth fault relay with 3 Nos. current transformers of 125/5 ratio, 15 VA Class 5P 10 (Numeric Relay not required.)				
	Under voltage, Overvoltage & phase reversal relay for persisted voltage of 105-180% & 20-95% of rated voltage (Numeric Relay not required).				
	OUTGOINGS:-				
	2 Nos 40 A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For Light DB & Spare)				
	3 Nos 40 A DP MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars.				
	2 Nos 63 A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (for AC and Power DB)				
	The electrical panel as described above and specifications complete.	Set	1		

Signature & Seal of Contractor/Vendor

Date:

S.NO	DESCRIPTION OF WORKS	UNIT	QTY	RATE	AMOUNT
E	(LIGHT FITTINGS & ACCESSORIES)				

	Supplying, installation with hanging support, testing and commissioning of following light fixtures with electronic Ballasts, Tubes, lamps, all fixing materials including connecting wires etc. all complete as per the directions of Engineer-in-charge (All LED Light Fixtures should be covered with minimum 3 Years onsite replacement warranty).				
i	LED 18 W tube 4'-0" As specified in tender document or approved by SBIIMS/Architect.	Nos.	3		
ii	FULL GLOW 2 X 2 LED 36 W slim Smart Panel of make As specified in tender document or approved by Architect. HAVELLS/ PHILIPS	Nos.	33		
lii)a	Supplying, fixing, testing and commissioning of 15 W LED commercial type down lighter of make As specified in tender document HAVELLS/PHILIPS	Nos.	30		
lv)a	LED Strip for cove lighting 15 W per 5 M with driver and necessary installation fittings Led strip light (5 mtr.) make as specified in tender document[PHILIPS/ HAVELLS or approved by Architect.	Nos.	10		
1v)b	P/f LED spot light, tiltable 3 watt,Ceiling mounted white color body,Philips.	nos	10		
V)a	Wall mounted fans (METAL BODY) 400 mm dia. make As specified in tender document or approved by concerned office in charge. CROMPTON/ HAVELL	Nos.	10		
V)b	Supply & fixing of 230 mm exhaust fan 'Ventilair DX W' with self-closing louvers and plastic body with all accessories etc. complete of make As specified in tender document or approved by concerned office in charge.	Nos.	4		
	PART (E) SUB TOTAL				

F.	EARTHING SYSTEM				
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1	Supply, Installation, Testing and Commissioning of Maintenance Free Earthing system made up of copper bonded rod of 10 feet length, 17.2 mm dia. (Minimum copper bonding shall be 0.25 mm) along with Rod-to-Conductor connectors, Earth enhancement material, Pit Cover and other accessories as required and as per specification and other applicable codes (include chamber for earthing, Earthing certificate to be submitted along with the bill).	Nos	2		
2	Providing and fixing 2 X 8 SWG dia. Cu earth wire in PVC conduit on surface or in recess for loop earthing along with the existing surface/ recess cable as required.	RM	25		
	PART (F) SUB TOTAL				

LIST OF APPROVED AND NOMINATED MANUFACTURERS / SUPPLIERS OF MATERIALS

ELECTRICAL, LAN WORKSMAKE OF MATERIALS

UCO Bank, Z.O. Delhi

1	PVC fittings	Kalinga /SUPER/ AKG / Precision
2	Wires – PVC insulated copper	Finolex / Havells/Skytone
3	Cables (armored)	Gloster / Nicco / Havells / Evershine KDK
4	A.C Starter, Plug Socket	Legrand / Crabtree / Northwest
5	Light & Power switch socket	Crabtree-Signia series /Honeywell
6	Telephone Socket	RJ-11 Crabtree-Signia / Honeywell
7	DB MCB	Legrand/ Havell's/Standard
8	MCB	Legrand / Havell's / Standard
9	Telephone cable	D-Link/.51 Netco / National
10	Light fitting	PHILIPS, Wipro,Havells Approved by Architect.
11	Fuse Switch	L&T / Havell's
12	Telephone Connector	Corn

13	Ceiling/ Wall fan	Crompton / Orient / Khaitan
14	Exhaust fan	Crompton / Orient / Khaitan
15	P.V.C tape	Steel Grip
16	Call bell	Max
17	Cable Lug	Dowell's
18	Cable gland	Brass heavy type good quality
19	Distribution board	MDS / Havell's
20	MS conduit	Heavy duty with ISI mark 16 SWG
21	Starter & single phasing preventer	SEIMENS
22	SPN, TPN, Sheet metal	Havell's / MDS
23	Pipe Metal	M.S Conduit 16 S.W.G
24	Metal Pipe Fittings	Cast iron with thread & inspection cover
25	Pipe PVC (Rigid Conduit)	Kalinga /Super/AKG / Precision
26	PVC fitting for Rigid	-Do-

27	PVC Roll Pipe	Super Dalda or equivalent heavy guage
28	PVC Casing Casing Fittings	Good quality heavy guage (colour white)
29	Lugs	Dowells
30	Terminals	Essen/Elmex
31	Burgularalarm	Godrej/Globe Detective
32	E-Cat 6 Patch Pannel	D-link/Avaya

NOTES:

1. In case of unavailability of any material of specific make an equivalent make can be used only after a written approval of Architect. The preference of make/brand of the material listed above will be decided by the Architect. The make/brand of any other item will be as mentioned in the drawings issued by the Architect.
2. The contractor shall provide samples of all materials mentioned in the list of makes as required by the Architect. A written approval of these samples shall be sought prior to commencement of any work. Architect reserve the right to enquire the genuineness of any material used at site directly from the manufacturer/Dealer.

LIST OF APPROVED AND NOMINATED MANUFACTURERS / SUPPLIERS OF MATERIALS

UCO Bank, Z.O. Delhi INTERIOR FURNISHING ITEMS

Sl.No.	MATERIALS	APPROVED BRANDS
1.	False Ceiling & Cornices	: India Gypsum
2.	Wood Framework: All wood must be well seasoned, Free from knots, other defects.	: Malaysian sal / Maranti (seasoned) with 2 coat of wood preservative
3.	Wood skirting /mouldings, Liping /beading and door frame	: Steam beech/ Mahogany/Teak wood/Sal wood.
4.	Commercial ply	: Archid / Century/ Greenply MR GRADE
5	HDMR Board	: Archid / Century/ Green/
6	Laminate	: Formica/ Century / Merino
7.	Veneer	: Mayur/ Durian/Century
8.	Flush Door	: Mayur / Century / Greenply
9.	Wood Preservative	: STP- Pentaphene pale / Termination Tor (Pidilite)
10	Adhesive	: Fevicol SH (Pidilite) / Araldite/SR-998/Century – SH.
11.	Door Closer	: Godrej /Ozone/Opel

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|-----|----------------------------|--|
| 12. | Floor Spring | : DORMA/OZONE |
| 13. | Door Lock | : Godrej Cylindrical pin level / ozone |
| 14. | Drawer Lock | : Godrej Multipurpose/ Ozone |
| 15. | Hardware | : GKW/Ebco |
| 16. | Hinges | : CIEF/Ebco |
| 16. | Screws | : GKW/ Nettle fold |
| 17. | Carpet | : Transasia / Uniproducs |
| 18. | Vertical blinds | : Vista Levolor/Mac Decor |
| 19. | Sun Control Film | : Garware/3M |
| 20. | Soft Board / Display Board | : Jolly board |

Sl. No MATERIALS

APPROVED BRANDS

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|-----|----------------------------|-------------------------|
| 21. | Paints (Enamel & Emulsion) | : Asian / Berger/ICI |
| 22. | Texture paint | : Spectrum |
| 23. | Ceramic Tiles | : Nitco/ Kajaria, |
| 24. | Vitrified tiles | : Kajaria/NITCO/Johnson |

25. Glass : Modi Guard/ Saint gobain
26. Handle : Stainless steel finish Neki / Hassely
27. PVC Floorings : Armstrong/Krishna Vinyle
28. Waterproofing Compund :Dr Fixit/ Asian Paints

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