

BOQ					
INTERNAL ELECTRIFICATION OF					
UCO BANK LODIPUR, BHAGALPUR BRANCH					
I. ELECTRICAL WORKS					
Part-A					
SL. NO.	DIFFERENT HEADS OF WORK	AMOUNT IN RS.	REMARKS		
1	Sub Head - I (WIRING)		Based on Schedule rate of of Bihar.(2018) / M.R		
2	SUB HEAD - II (SUPPLY OF CABLE & SUBMAIN)		1		
3	SUB HEAD - III (SUPPLY & MAKING OF EARTH PITS)		Bihar Government of Rates-(2018) / M.R		
Part-B					
4	SUB HEAD - IV (SUPPLY OF FIXTURES & FANS)		Bihar Government of Rates-(2018) / M.R		
	TOTAL				
(REQUIRE INVERTOR POWER FOR LIGHT POINT LOAD IF YOU REMOVE THE GENRATOR)					
SL. NO.	ITEM OF WORK	UNIT	QTY	WATTS	TOTAL WATTS
1	Supplying and fixing of 9/10 watt LED lamp types lamp in the existing electrical fitting/ fixtures etc. as required	Each	5	10	50
2	Supplying, Installation, testing and commissioning wall mounted 20/22W 6500k LED 4Feet tube Luminaries batten fitting complete with electronic driver and LED tube etc.	Each	2	22	44
3	Supplying and fitting 375 mm 230 volts sweep Exhaust fan with plastic body and blade, self closing louvers in this fan.	Each	2	60	120
4	Supplying and fitting 1200 mm sweep ceiling fan three coat metallic paint system, high speed, wider tip blades, improved performance even at low voltage inclusive of all taxes, royalty etc.	Each	2	60	120
6	Supplying and fitting electronic musical call bell suitable for single phase 230 volts commissioning and connection etc. as per require approved equivalent.	Each	1	40	40
7	Supply and installation of 400 mm, 230 v A.C. wall/cabin fan.	Each	9	60	540
8	Supplying and fixing indoor recess mounting 36 watt LED flat panel luminaire suitable for armstrong / grid ceiling and complete with electronic driver etc.	Each	17	36	612
9	Supplying and fixing ceiling mounted 12 watt LED vertical downlighter complete with all accessories.	Each	7	12	84
	TOTAL SUB HEAD-VI				1610
TOTAL LIGHT POINT LOAD=1598 WATTS SAY REQUIRE INVERTOR 2KVA/220VOLTS IF YOU REMOVE THE GENRATOR)					



ESTIMATE OF ELECTRICAL WORKS

SUB HEAD - I (WIRING)

Part-A

SL. NO.	ITEM OF WORK	UNIT	QTY	RATE	AMOUNT
1. 1.3.3 (C)	Wiring for Light / Fan/Wall fan / Exhaust Fan / Call Bell point with 1.5sq.mm FR PVC insulated Copper Conductor single core cable in recessed medium class PVC Conduit in surface / recessed Moudaler type switch, Moudaler Plate ,sutable size PVC/GI box etc. (Group-C) as required, all complete as per instructions of Elec.Er. / Architect.	Light Point	36		
2. 1.7.1	Wiring for switch board and 5A socket power circuit/submain wiring along with earth wire with 2x1.5 sq. mm +1x1.5 FR PVC insulated copper conductor single core cable in surface / recessed medium PVC conduit. as required, all complete as per instructions of Elec.Er./ Architect.	Mtr.	118		
3. 1.7.2	Wiring for Computer Raw and UPS circuit/submain wiring for 5A power point along with earth wire with 2x2.5 sq. mm +1x2.5 FR PVC insulated copper conductor single core cable in surface / recessed medium PVC conduit. as required, all complete as per instructions of Elec.Er./ Architect.	Mtr.	128		
4. 1.7.3	Wiring for circuit/submain wiring for 15A power and 25A A.C. power point along with earth wire with 2x4 sq. mm +1x4 FR PVC insulated copper conductor single core cable in surface / recessed medium PVC conduit. as required, all complete as per instructions of Elec.Er./ Architect.	Mtr.	62		
5. 1.7.3	Supply & Fixing for sub main from L.T Penal to Light point D.B's- 2 x 4sq. mm PVC insulated copper conductor single core cable in recessed PVC conduit with 1x4 sq mm PVC insulated copper conductor single core cable for loop earthing as required, all complete as per instructions of Elec.Er / Architect.	Mtr.	6		
6. 1.7.3	Supply & Fixing for sub main from L.T Penal to Raw point D.B's- and UPS Panel to UPS D.B'S- 2 x 4sq. mm PVC insulated copper conductor single core cable in recessed PVC conduit with 1x4 sq mm PVC insulated copper conductor single core cable for loop earthing as required, all complete as per instructions of Elec.Er / Architect.	Mtr.	14		
7. 1.24.1 1.24.4	Supplying and fixing 5 pin, 5/6 amps socket outlet and 5/6 amps Modular type switch connection etc up-on switch board, as required all complete as per instructions of Elec.Er / Architect.	Set	8		
8. 1.31	Supplying and fixing 1nos Modular type 5Amp 5 pin socket with 5Amps switch, Modular Plate, suitable size PVC/G.I. box as required, all complete as per instructions of Elec.Er. / Architect.	Set	11		
9. 01.32	Supplying and fixing 1nos Modular type 15Amp 6 pin socket with 15Amps switch, Modular Plate, suitable size PVC/G.I. box as required, all complete as per instructions of Elec.Er. / Architect.	Set	1		
10. 02.19	Supplying and fixing 20Amp 240 volts SPN MCB industrial type, power socket with 25Amp SPN MCB and 25 Amps Top in proper size steel box and plate as required. all complete as per instructions of Elec.Er. / Architect.	Set	3		
11. 03.17	Supplying and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing etc. as required.	Mtr.	35		



12. 1104	Supplying and fixing 6.0 sq. mm ISI marked, FRLS PVC insulated single core copper conductor cable on surface or in recess for loop earthing etc. as required.	Mtr.	40		
13. M.R	S/I/T/Commissioning of 5 Kva UPS- PRIMARY & SECONDARY consist of:-40Amps SPN incomer MCB with 60 amps TPN conector and outgoing 2 Nos 25Amps SPN power socket in MS Enclosure box as required, all complete as per instructions of Bank / Architect.	Set.	1		
14. 1.56 Computer	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 nos. 5 pin 5/6 amps modular socket outlet and 2 nos. 5/6 amps modular switch, connection etc. as required.	Set	8		
15. 01.33	Supplying and fixing ceiling rose 2 pin 6amps on exisiting junction box/ wooden block including connection etc. as required.	Each	4		
16. 01.34	Supplying and fixing brass/ angle holderon exisiting junction box/ wooden block including connection etc. as required.	Each	4		
17. 1.24.6	Supplying and fixing Telephone socket outlet modular switch/socket on the existing modular plate and switch box including connections but excluding modular plate etc. as required.	Set	2		
18. 1.27.1	Supplying and fixing Telephone 1 or 2 modular 75mmx75mm size / modular, GI box along with modular base and cover plate for modular telephone socket and bell push switch in recess etc. as required.	Set	2		
19. 1.28.1	Supplying and fixing Telephone 1 module modular base and cover plate on existing modular telephone socket and bell push switch's GI metal boxes in recess etc. as required.	Set	2		
20. 1.16.2	Supplying and drawing two pair 0.5 sq. mm Two pair FR PVC insulated annealed copper conductor, unarmoured telephone cable in the existing surface / recessed PVC conduit as required.	Mtr.	30		
21. 1.24.8	Supplying and fixing call-bell push modular switch/ socket on the existing modular plate & switch boxincluding connections but excluding modular plate etc.as required.	Set	1		
22. 1.25.0	Supplying and fixing stepped type electronic fan regulator on the existing modular plate/ switch box including connections but excluding modular plate etc. as required.	Set	2		
23. 2.10.1	Supplying & fixing of Singal phase 4 way (4 + 12), Vertical type way double door S.P.N with RCCB D.B board for circuit distribution on surface / recess double door complete with tinned copper bus bars, neutral link, earth bar, din bar, detachable gland plate inter connections including painting, earthing etc. as required. all complete as per instructions of Elec.Er. / Architect.	Each	3		



24. 2.17.2	(iii) Supplying and fixing 40A rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	3		
25	Supplying & fixing of following rating and series miniature circuit breaker and residual current circuit breaker in the existing MCB DB complete with connection testing and commissioning etc. as required, all complete as per instructions of Elec.Er. / Architect.				
25.A.2.12.1	(i) 06A/10A, SP, M.C.B-'B' (Light)	Each	8		
25.B.2.12.2	(ii) 10A,SP, MCB-'C' (UPS & RAW) -for three computer	Each	12		
25.E.2.12.3	(iii) 32A/40A SPN MCB-'B'	Each	3		
26. M.R.	Supplying/fixing of Cat-6 wire with 20mm. dia PVC/G.I pipe all complete or as per instruction Ele.Er./Architect	Mtr	178		
27. M.R.	Supply & Fixing of 1 Nos. I.O. box & jack from Net-working switch Hub in each computer set all complete as per instnction of Ele.Er./Arch.	Set	8		
28. M.R.	S/I/T/C of CAT-6- 24 Port Switch. -Make-D-LINK.	Set	1		
29. M.R.	S/I/T/C of CAT-9 U Jack Panel set all complete as per instnction of Ele.Er./Arch.	Set	1		
30. M.R.	S/I/T/C of CAT-9 U Jack Rack set all complete as per instnction of Ele.Er./Arch.	Set	1		
31. M.R.	S/I/T/C of power line strip with 6nos. 5Amp Moudlar type socket from UPS set all complete as per instnction of Ele.Er./Arch.	Set	1		
32. 2.5.3	Providing and fixing 300amps capacity busbar chamber with 4 strips of suitable size made of copper, heavy duty, complete with all accessories including connections, earthing the body etc. as required.	Set	2		
33. 2.4.9	Providing and fixing 63amps, rating and 16 ka breaking capacity MCCB in made of existing 1.6mm thick sheet steel enclosure duly painted with powder coating, wall straps cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.	Each	1		
34. 2.12.2	Providing and fixing 25 amps, rating and 10 ka. breaking capacity MCB, SPN for A.C power supply in made of existing 1.6mm thick sheet steel enclosure duly painted with powder coating, wall straps cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.	Each	3		
35. 2.12.3	Providing and fixing 32 amps, rating and 10 ka. breaking capacity MCB, SPN for DB in made of existing 1.6mm thick sheet steel enclosure duly painted with powder coating, wall straps cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.	Each	3		
36. 2.7.2	Providing and fixing 63A capacity four pole ONload/panel mounted changeover switches inside the existing cubical panel board including drilling holes in cubicle panel, making connections etc. as required.	Each	1		
37. M.R.	Providing and fixing 32A/32A capacity four pole ONload/panel mounted ACCL OR ATS (Auto Transfer switche) inside the existing cubical panel board including drilling holes in cubicle panel, making connections etc. as required.	Each	1		
38. 02.20	Providing and fixing M.V danger notice plate of 200mmx150mm made of mild steel at least 2mm thick, vitreous enameled white on both side and with inscription in singale red colour on front side in excluding cubical panel as required.	Each	1		
39. 8.10.13	Supply and fixing panel mounted digital multimeter (Voltmeter & ammeter) including CT coil and RYB pilot indictor in the existing cubical panel board including drilling holes in the panel board making connections etc as etc as required.	Each	1		



40. 8.12	Providing and fixing wall mounting iron sheet cubical panel board, fabricated with 16 SWG guage Iron sheet, suitable size for panel mounted disconnector, including, busbar chamber, insulator, nut-bolt and painting etc. as per require. size made 5'-0"x 4'-6"x12"-20sq.feet.	Sq.feet	20		
TOTAL SUB HEAD-I					
SUB HEAD - II (SUPPLY OF CABLE MAIN & SUBMAIN)					
SL. NO.	ITEM OF WORK	UNIT	QTY	RATE-Rs.	AMOUNT-Rs
1. 7.7.6	Supply of 16 mm sq. sizes and 4 core PVC/XLPE insulated, PVC sheathed (heavy duty) armoured electrical power cable with aluminium conductor for working voltage upto 1.1 KV as required.	Mtr.	30		
2. 7.7.5	Supply of 16 mm sq. sizes and 2 core PVC/XLPE insulated, PVC sheathed (heavy duty) armoured electrical power cable with aluminium conductor for working voltage upto 1.1 KV as required.	Mtr.	30		
3. 7.1.1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required	Mtr.	40		
TOTAL SUB HEAD-II					



SUB HEAD - III (SUPPLY & MAKING OF EARTHPITS)					
SL. NO.	ITEM OF WORK	UNIT	QTY	RATE-Rs.	AMOUNT-Rs
1. 3.21 OR 3.6+3.8+3.9	<p>Providing chemical/mineral maintenance free earthing system comprising of copper coated earth electrode 3 metre length and 17.2 mm outer dia along with 25 kg earth conductivity enhancing back fill mineral compound for earth inspection pit etc. as required.</p> <p>OR</p> <p>Supply, Fixing & Hole cutting in earth as per drawing of (CU) (600mm X 300mm X 3mm) plate electrode earth, all complete as per specifications and drawings attached. (1 No. EARTH for UPS Main neutral only.) -The rate shall be inclusive of submission of TEST REPORT (2 Ohm) of each earth pit and</p> <p>*Caution Note -The rate shall be inclusive of submission of TEST REPORT (2 Ohm) of each earth pit and TESTING shall be carried out in front of Officials / Consultant.</p>	Each	4		
	TOTAL SUB HEAD-III				
SUB HEAD - IV (SUPPLY OF FIXTURES & FANS)					
SL. NO.	ITEM OF WORK	UNIT	QTY	RATE-Rs.	AMOUNT-Rs
1 6.14	Supplying and fixing of 9/10 watt LED lamp types lamp in the existing electrical fitting/ fixtures etc. as required	Each	5		
2. 5.5	Supplying and fixing replaceable compact commercial batten suitable for Double TB LED tube complete with 20 watt LED polycarbonate TB tube with built in driver etc. directly on wall/ ceiling including connections with 1.5 sq.mm FRLS PVC insulated copper conductor etc. as required.	Each	2		
3. 8.17.2	Supplying and fitting 375 mm 230 volts sweep Exhaust fan with plastic body and blade, self closing louvers in this fan, to provide off mode protection against birds etc as per req. approved equivalent.	Each	2		
4. 8.15	Supply and installation of regular/standard model A.C. ceiling fan of 1200 mm sweep with service value (CM/MM) minimum 4.00, Air delivery minimum 270 cum/min including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated copper conductor etc as required. approved equivalent.	Each	2		
5. 1.38	Supplying and fitting electronic musical call bell suitable for single phase 230 volts commissioning and connection etc. as per require. approved equivalent.	Each	1		
6. 8.19	Supply and installation of 400 mm, 230 v A.C. wall/cabin fan including fixing the bracket, making connection, testing, commissioning etc as required.	Each	9		
7. 5.7.3	Supplying and fixing ceiling mounted 12 watt LED vertical downlighter complete with all accessories and replaceable electronic driver, directly on false ceiling including connection with 1.5 sq.mm FR PVC insulated copper conductor cable and earthing the body etc. as required. approved equivalent.	Each	7		
8. 5.9	Supplying and fixing indoor recess mounting 36 watt LED flat panel luminaire suitable for armstrong / grid ceiling and complete with electronic driver etc. directly on false ceiling including connection with 1.5 sq.mm FR PVC insulated copper conductor cable and earthing the body etc. as required	Each	17		
	TOTAL SUB HEAD-IV				

