

UCO BANK					
NAME OF WORKS: PROPOSED INTERIOR DESIGN FOR ATHWALINES BRANCH, GHOD-DOD RD., SURAT.					
Part-02-BOQ of Internal Electrical work.					
NOTE: CONTRACTOR NEED TO FILL THE RATES IN ZERO QTY. ITEMS ALSO.					
Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
<b>Part-01</b>		<b>Internal Wiring</b>			
1	45.00	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. <b>(a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete - Cat III</b>		Point	
2	7.00	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected <b>with 6A Modular type switch and hum free EME four or more step type electronic fan regulator</b> with separately mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. <b>(a) with medium class Rigid PVC pipe and accessories Cat.III</b>		Point	

Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
	6.00	<p>Point wiring for Individual Plug with &amp; earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch &amp; 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories.</p> <p>[I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board</p> <p>(a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete...</p> <p>Cat-III</p>		Point	
3	1.00	<p>[II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board.</p> <p>(a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete</p> <p>Cat-III</p>		Point	
4	9.00	<p>Point wiring for on board Looped Plug with 6A Modular type switch &amp; 5 pin socket erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate modules erected on / in wall / ceiling with following type accessories...</p> <p>Cat. III</p>		Point	
5	2.00	<p>Point wiring for Two Way Controlled Light Point with 2-1.5 sq.mm &amp; earth wire of 1.5 sq.mm (green) both are of .ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires erected in below type of pipe with 6A Modular type switches and following type of accessories erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary batten/angle holder or ceiling rose or H.D.Connector as directed.</p> <p>(a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete...</p> <p>Cat. III</p>		Point	

Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
6		Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate , modules erected with necessary connection. As desired by Engineer In charge  (3) Two Pin/RJ-11 Telephone Socket [A] For One Gang Cat. III			
	7.00			Each	
	2.00	(4) TV Co-axial Socket outlet - Cat III		Each	
	20.00	(7) Blank Plate Single Cat. III		Each	
	18.00	(8) Modem Jack for Computer Open RJ-45 - Cat III		Each	
6	0.00	(22) 25 Amp. Modular Starter for Motor / A.C. Unit Complete. CAT-III.		Each	
7		Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm			
	80.00			Mtr.	
	100.00	(b) 25 mm		Mtr.	
7	10.00	(c) 32 mm		Mtr.	
8		Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check-nuts etc. complete of following sizes.			
	5.00	(1) 20 mm		Mtr.	
	5.00	(2) 25 mm		Mtr.	
9		Supplying & erecting UPVC Mini trunking (PVC Casing-n-Capping) having double-locking arrangement with grooves, trunking of size not below 12.5 mm in height as per IS with accessories of PVC/Resin polypropylene not below 1.8 mm thick duly sealed in joint & erected on wall / ceiling of following size .			
	1.00	(1) 20 mm		Mtr.	
	1.00	(2) 25 mm		Mtr.	
10		(A) Supplying and laying UPVC cable trucking system comprising unplasticised polyvinyl, chloride rigid material with ignition free & flame proof confirming BS. With All necessary accessories (Like elbow, tee, bank etc..) and measuring of following sizes. (1) 75 mm x 50 mm trucking			
	1.00			Mtr.	
10	1.00	(2) 100 mm x 50 mm trucking		Mtr.	

Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
11		Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size  [c] 2 wire 1.5 sq.mm			
	40.00			Mtr.	
	40.00	[d] 2 wire 2.5 sq.mm		Mtr.	
	200.00	[i] 3 wire 1.5 sq.mm		Mtr.	
11	400.00	[j] 3 wire 2.5 sq.mm		Mtr.	
12	1.00	Providing & Erecting approved make following size of TV Co-axial flexible cable comprising inner conductor of solid bare copper insulated with Foam PE & Secondary conductor made of poly - Aluminium film bonded Al. Braids @ suitable coverage overall sheathed with black PVC insulation.  b).RG-6		Mtr.	
13		Supplying & erecting approved make Telephone Cable electrolytic copper conductor PE insulation twisted in two pairs, & wrapped with FRLS PVC tape & sheathed with FRLS PVC or HFFR outer Jacket suitable for telephone wiring & confirming to C-DOT erected in existing pipe. of following size of conductors & nos.of pairs. With necessary connections.			
		[A] Conductor Size 0.5 mm (a) Unarmoured			
	1.00	1) One Pair		Mtr.	
	49.00	2) Two Pairs		Mtr.	
	1.00	3) Three Pairs		Mtr.	
14	135.00	Supplying & erecting approved make LAN cable of following size in existing pipe as per direction [D] CAT - 6 e (For Telephone & Computer Distribution)		Mtr.	

Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
15	9.00	Providing & erecting Switch board for Computer or electric apparatus consisting of following modular type accessories mounted with PVC / Metallic concealed/open box with single mounting base frame covered with textured/metallic /white front plate,modules erected with necessary connections as directed 1 no. 6A/16A universal plug-switch combined. 3 nos. 6A Switch 3 nos. 6A 5 pin Plug [B] For Modular Type Accessories... CAT- III.		Nos.	
16	2.00	Decorative call bell Ting-tong box type 250 volts complete erected		Ea.	
17	18.00	Supply & Installation of D-Link or equivalent company make Cat- 6 I/o.		Ea.	
<b>Part-02</b>		<b>Light Fixtures</b>			
	8.00	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 120 to 300 V,Power Factor more than 0.9, THD < 10 %, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt ,LED efficiency-110 lumens/watt LED driver efficiency > 85 % CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL/Bridgelux make LED used for luminaire. ( fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.)CAT III. <b>(A) Tube Light with integral/ non-integral driver</b> <b>(d) 22-24 Watts, Surge - 2KV,IP-20, 4 feet</b>		Each	
	2.00	(A) Tube Light with integral/ non-integral driver (a) 10 Watts, Surge - 2KV,IP-20, 2 feet.		Each	
17	20.00	(D) LED Panel Light with provision for Plane front frame with translucent cover fixed to housing complete.IP20  (b) 12 watts, Surge-2 KV- Round Shape Cat.: III		Each	
18	3.00	(D) LED Panel Light with provision for Plane front frame with translucent cover fixed to housing complete.IP20  (d) 18 to 20 watts, 8" x 8", Surge- 2 KV- Round Shape Cat.: III		Each	

Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
19	6.00	(D) LED Panel Light with provision for Plane front frame with translucent cover fixed to housing complete.IP20  (f) 36 watts, 24" x 24" mm, Surge- 2KV Cat-III		Each	
<b>Part-03</b>		<b>LT Switchgear, Distribution Boards &amp; LT Panel</b>			
20	01.00	<p>Supply, installation, testing and commissioning of Main panels as per drawing and specifications. Panel should be dust and vermin proof. Panel shall be fabricated from 14/ 16 SWG CRCA sheet metal duly powder coated of approved paints. Panel should be as per the sepecifications of ERDA/ CPRI. fabrication, Switch gear installation. Internal wiring and Test Certificate from Manufacturer to be submitted. - All MCBs must be C Type Characteristic. Panel Drawing Need to be approved by Electrical Consultanat / Bank's Engineer before starting work.</p> <p>MAIN PANEL :</p> <p>Incoming feeder : 125 AMCCB C&amp;S Make CSE1N125ETM4P-125A or L&amp; T MAKE; CM92153OOOOAG-125A or LEGRAND MAKE: DPX3-160A:4201 15-125A (1 No.). The MCCB should have inbuilt Earth Fault &amp; Nutral Overload Protection with Power Supply &amp; Display Module for Metering &amp; Fault Recording.</p> <p>* 80 A, FP Change over switch (1 No.).</p> <p>* 160 AMP. 500 Volts, 3 phase 50 Hz FP Alu. bus bars of suitable length -Current ratio shall be 1 sq mm = 1.2 A.</p> <p>* Digital AVF Meter with control fuses. C.T. shall be of 15VA class 1 type and shall be resin cast type.</p> <p>* Phase indicator lamps phase wise.</p> <p>* Outgoing feeder:</p> <p>* 25 A DP MCBS (1 no - SERVER AC ).</p> <p>* Timer of L &amp; T make Cat. No. 67DDTO digicom Timer with 16A. 4P contactor / Theben make Cat no. SUL 180 a - T180 0 001 ANALOG Timer with L &amp; T make contactor MNX 18 ( operating coil voltage 230V, 50 Hz). (24 hrs).- 1 No for signage light.</p> <p>* 06 A DP MCB (1 no - Sign board digital clock).</p> <p>* 40 A DP MCB (1 no - Sign board).</p> <p>* 40 A FP MCB (1 NO - LDB ).</p> <p>* 63 A FP MCB (1 NO - UPSDB ).</p> <p>* 63 A FP MCB (1 NO - ATMDB).</p> <p>* 40 A FP MCB (1 NO - PDB ).</p> <p>* 63 A FP MCB (1 NO - ACDB) .</p> <p>* 40 A FP MCB (1 NO - SPARE DB).</p>		No.	

Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
21	1.00	Providing and Installing of MCB DB for lighting incoming with 40A FP MCB 1 no., 25 A DP MCB 3 Nos., 20 A SP MCB 9 Nos. THIS WILL BE INSTALLED NEAR MAIN DOOR - INSIDE OR OUTSIDE - OF THE BANK. ( first ask to BM / Consultant / Architect / Bank Authority)		Each	
22	1.00	Providing and Installing of MCB DB for AC incoming with 63A FP MCB 1 no., 32 A FP MCB 1 Nos., 25 A SP MCB 7 Nos. THIS WILL BE INSTALLED NEAR MAIN DOOR - INSIDE OR OUTSIDE - OF THE BANK. ( first ask to BM / Consultant / Architect / Bank Authority)		Each	
23	4.00	Miniature circuit breaker single pole 6A to 32A suitable to operate on 240 V A.C. system and having overload and short circuit tripping elements and breaking capacity 10 KA to be erected in existing M.S. box confirming to IS 8828/1996 with ISI mark. Cat.III		Each	
24		Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity			
	1.00	(A) 6 to 32 Amp. Cat.III		Each	
	1.00	(B) 40 Amp. Cat.III		Each	
25	0.00	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity. (a) 6 to 32 Amp. Cat-III		Each	
	1.00	(b) 40 Amp. Cat-III		Each	
	1.00	(c) 63 Amp. Cat-III		Each	
26	2.00	Plastic enclosure fitted with DIN rail suitable for incorporating One / Two nos. MCB		Each	
27	0.00	Providing and erecting Sheet Steel powder coated MCB Distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirming to IS 13032 and BS 5486-1986 without MCB to house appropriate nos. of MCBs. (The DBs should be used of same company of MCB to be used) (A) Single phase 12 way SS single door		Each	
	1.00	(B) Single phase 16 way single door		Each	
	1.00	(C) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) <b>16 way sheet steel double door</b>		Each	

Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
28	0.00	Approved make ELCBs / RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed. Cat III (i) 25 Amps.DP		Each	
	0.00	(ii) 40Amps. DP		Each	
	1.00	(iii) 63 Amps. DP. Cat III		Each	
29	6.00	Supplying & erecting approved make Electronics Starter and relay for air conditioners in ABS plastic moulded housing. Company fabricated with bakelite terminal for connection with silver coating bimetallic contact in switching device for o/p with following features. (1) Low Voltage Protection below 130 V (2) High Voltage protection above 270 V (3) Overload protection for 2-5, 4-10, 8-14, 10-16, 14-22 Amp. (inverse time chara-) (4) Indicating LEDs for AC on LV, HV, O/L, T/D (5) With unique feature of 3 minute of time delay  For All HVAC System- 10 Machines		Each	
<b>Part-04</b>		<b>LT Cables &amp; Cable Termination</b>			
30	20.00	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables.  (A) 4 core 10 Sq. mm		Mtr.	
31	40.00	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables.  (C) 3 1/2 core 50 Sq. mm ( 25 Sq. mm 1/2 core)		Mtr.	
	0.00	(D) 3 1/2 core 70 Sq. mm ( 35 Sq. mm 1/2 core)		Mtr.	
32		Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables.			
	5.00	(a) 2 to 4 core 2.5 / 4 to 6 Sq. mm		Each	



Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
	6.00	Providing and, fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (B) 3 & 1/2 core 35/50 Sq. mm		Each	
33	0.00	(C) 3 & 1/2 core 70 Sq. mm		Each	
	15.00	Solder less crimping type Copper lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (A) 1.5/2.5 to 6 Sq.mm		Each	
34					
<b>Part-05</b>		<b>EARTHING</b>			
		Providing and making Earthing Pit with all necessary material and making masonry kundi, watering arrangement etc complete as per ISI 3043-1987 (FOLLOWING ITEMS MAY OPERATE). Resistivity as per IEC / IS. ( 3 years Manufacturer Warranty. Earthing Certificate Need to Attached). ( At the Time of buried of earthing Photograph must be taken Without Photographic Proof Earthing Will be Rejected. Earthing Rod Photo Must be attached with Bill.).			
35	1.00	ECO SAFE environment friendly electrical grounding system with T-193- Hot Dip Galvanised, having 50mm dia. of outer pipe and 25 mm dia. of inner pipe and length of 3RMT.s with 50kg Back Fill Compound as per UL 476, of Powerfill Eco friendly electrical grounding backfill compound and clamp (DB - PANEL) - G. I. -(Chemical GI Earthing) ERDA & NSIC approved, E link or ETP MAKE or ASHLOK MAKE. Any other make will not be consider. (DB - PANEL) .		NOS.	
36	2.00	ECO SAFE environment friendly electrical grounding system with T-193- Copper electrode used upto 11 KV, having 50mm dia. of outer pipe and 25 mm dia. of inner pipe and length of 3RMT.s with 50kg Back Fill Compound as per UL 476, of Powerfill Eco friendly electrical grounding backfill compound and clamp (UPS) - Chemical CU Earthing) ERDA & NSIC approved, E link or ETP MAKE or ASHLOK MAKE. Any other make will not be consider. - Cu. ( UPS) .		NOS.	
		Supply, laying and jointing of following wire / strip / earth cable on walls, ceiling etc. With necessary non rusting clamps, washers, nuts and bolts etc complete.			
37	10.00	25 x 3 mm G.I. Strip - From G. I. Earthpit to Main Panel in existing 40 m MMS rigid pvc conduits.		RMT.	
38	5.00	25 x 3 mm CU.strip in existing 40 m MMS rigid pvc conduits From Cu. Earthpit to UPS I / P DB.		RMT.	

Item Sr. No.	Qty	Description of Work/ Item	Unit Rate	Unit	Total Amount
39	30.00	8 SWG G.I. Wire with 20 mm dia. PVC rigid conduit duly cleated / concealed / burried in floor etc. complete for ELE. PANEL, ALL DBS , ETC.		RMT.	
40	30.00	8 SWG CU. Wire with 20 mm dia. PVC rigid conduit duly cleated / concealed / burried in floor etc. complete.		RMT.	
Part-06		Fan & Related Accessories			
		Supplying & erecting single phase approved make industrial exhaust fan suitable for medium duty ring mounted low noise operation suitable for medium duty having following dia size and maximum speed in RPM with Louver fins.			
41	3	[B] 380 mm dia 900 RPM		Each	
	1	[D] 450 mm dia 900 RPM		Each	
42	7.00	Providing & erecting Approved make Power Saving 50 Watt Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C. 50 Hz 1200 mm sweep complete having 3blades with aluminium blades with , canopy & 30 cm. down rod erected with earthing.(Make shall be approved by Engineer in charge))		Each	
Part-07		Timer Switch for AC			
43	1.00	Supplying, installation and commissioning of automatic 24 HRS. programmable TIMER of required capacity to run A.C. alternately (MDS/ L&T/ Other reputed make) for ATM A.C. machine.		No.	
Final Amount					
Final Amount WITH 18% GST:					
Amount in Word:					
Name of Contractor with Seal & Signature					
Date :		Place :			