



**PRICE BID
Annexure-III**

**BOQ ELECTRICAL INSTALLATION WORKS AT PROPOSED VIRTUAL RELATIONSHIP MODULE,
PATNA (BISCOUMAN BHAWAN)**

Sr. No.	ITEM OF WORK	UNIT	QUANTITY	RATE Excluding GST (In Rs.)	AMOUNT Excluding GST (In Rs.)
WIRING					
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5sq.mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required.	Set	160.00		
2	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	41.00		
3	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Each	56.00		
4	Supplying and fixing suitable size GI box with rnodular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 5 pin 5/6 amps modular socket outlet and 2 nos. 5/6 amps modular switch, connection etc. (RAW POWER)	Set	96.00		
5	Supplying and fixing suitable size GI box with rnodular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 5 pin 5/6 amps modular socket outlet and 2 nos. 5/6 amps modular switch, connection etc. (UPS POWER)	Set	96.00		
6	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.	Each	16.00		
7	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator).				
	8way, Double door, I/C 63A, MCB TPN	Each	4.00		
8	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	16 way, Double door	Each	12.00		

9	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	6 A to 32'A, Single pole	Each	210.00		
	6 A to 32 A, SP&N	Each	12.00		
	40 A to 63 A, TP&N	Each	4.00		
10	Supplying and fixing 63A 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	12.00		
11	Supplying and fixing 63A rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	4.00		
12	Supplying and fixing ceiling rose 2 pin 6amps on existing junction box/ wooden block including connection etc. as required.	Each	15.00		
13	Supplying and fixing brass/ angle holder on existing junction box/ wooden block including connection etc. as required.	Each	15.00		
14	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
	2x1.5 sq. Mm +1x1.5 sq. Mm earth wire	Metre	440.00		
	2x2.5 sq. Mm +1x2.5 sq. Mm earth wire	Metre	3260.00		
	2x4sq. Mm +1x4 sq. Mm earth wire	Metre	580.00		
	2x6sq. Mm +1x6 sq. Mm earth wire	Metre	320.00		
	4X4sq.mm+ 1X4sq.mm earth wire	Metre	0.00		
	4X6sq.mm+ 1X4sq.mm earth wire	Metre	256.00		
	4X10sq.mm+ 1X4sq.mm earth wire	Metre	30.00		
	L.T LINE CANTROL PANEL-320A TPN				
15	Supplying Installation, Testing and Commissioning of on wall, testing and commissioning of following capacity rising mains made of 1.6mm thick IP 42 sheet steel enclosure duly painted with powder coating, wall straps, fully PVC insulated 4 Nos aluminium bus bars having current density of 130 A/ sq.cm at nominal current rating in convenient sections and suitable for 415 V, 3 phase, 4 wire, 50 Hz, A.C. supply with extension joints, fire proof barriers, expansion joints, thrust pads including jointing and earthing with 2 runs of galvanised iron strips etc. as required. (Rising mains conforming to IS 8623, TEC 439).	Each	1.00		
	300 A (S.C. rating for 1 sec - 20 kA)	Metre	6.00		
	600 A (S.C. rating for 1 sec - 20 kA)	Metre	6.00		
16	Providing and fixing 400 A, 35 KA, rating.breaking capacity MCCB (TPN) 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	1.00		

17	Providing and fixing 400 A, 35 KA, rating.breaking capacity MCCB (TPN) in made of existing1.6mm thick sheet steel enclosure duly painted with powder coating, wall straps cubicle panel board including drilling holes in cubicle panel, making connections, etc. with incloser box as required	Each	1.00		
18	Providing and fixing 125A, rating and 36 ka.breaking capacity MCCB (TPN) in made of existing1.6mm 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	5.00		
19	Providing and fixing 160A TPN capacity four pole ON-load panel mounted changeover switches inside the existing cubical panel board including drilling holes in cubicle panel, making connections etc. as required.	Each	1.00		
20	Supptying and fixing 160A, MCCB TP&N, rating 415 volts, TPN "C"curve, miniature circuit breaker suitable for inductive loads of two poles in the existing panel complete with connections, testing and commissioning etc. as required'	Each	1.00		
21	Supptying and fixing 63A, TP&N, rating 415 volts, TPN "C"curve, miniature circuit breaker suitable for inductive loads of two poles in the existing panel complete with connections, testing and commissioning etc. as required'	Each	8.00		
22	Supptying and fixing 63A rating, 240 volts, SPN "C"curve, miniature circuit breaker suitable for inductive loads of two poles in the existing panel complete with connections, testing and commissioning etc. as required'	Each	24.00		
23	Supply and fixing digital voltmeter, three phase in the existing cubical panel board including drilling holes in the panel board, making connection etc as required.	Each	1.00		
24	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 asrequired.	Each	1.00		
25	Providing and fixing selector switch for analog ammmeter as per require load in amps on front side in excluding cubical panel as required.	Each	2.00		
26	Providing and fixing Pilot lamp for indicator on front side in excluding cubical panel as required.	Each	3.00		
27	Providing and fixing M.V danger notice plate of 200mmx150mm made of mild steel at least 2mm thick, vitreius enameled white on both side and with inscription in singale red colour on front side in excluding cubical panel as required.	Each	1.00		
28	Providing and fixing wall mounting iron sheet cubical Main Electrical panel board, fabricated with 16 SWG guage Iron sheet, sutable size for panel mounted disconnecter, including, busbar chamer, insulator, nut-bolt and painting etc. as per require. size made 8'-0"x 6'-0"x12"=48 SQ. FT. Main Electrical panel should be designed in such a way DG SET should feed power to essential load only in case of power cut .The Main Electrical Panel Diagram must be approved by Electrical Enginner/Consultant.	SQ. FT	48.00		
29	Providing and fixing wall mounting iron sheet cubical OUT-DOOR VRF control panel board, fabricated with 16 SWG guage Iron sheet, sutable size for panel mounted disconnecter, including, busbar chamer, insulator, nut-bolt and painting etc. as per require. size made 4'-0"x 4'-0"x12"=16 SQ. FT.	SQ. FT	12.00		
	SUPPLY & MAKING OF EARTHPIITS				

30	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 Meter long etc. with charcoal/ coke and salt as required.	Each	6.00		
31	Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required	EACH	160.00		
SUPPLY OF FIXTURES & FANS					
32	Supplying and fixing replaceable compact commercial batten suitable for Singal 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. asrequired.	Each	7.00		
33	Supplying, Installation, Testing & Commissioning of LED Recessed/surface Down lighter (Round / square/ Rectangular) COB Type of following body material and construction as per IS : 10322 with driver as per the requirement with Driver efficiency >85%, Operating voltage AC 140-270 Volt, frequency 50/60 hz, Operating temp range -5 0C to 40 0C, internal surge protection of 2.5 KV with Short & Open circuit protection ,THD < 10% , P. F.≥0.95, IP20, CRI >80 , UGR (Unified Glare Rating) < 19, Flicker free (flicker should be below 5 %), life time (LED, Driver & electrical circuitry), life time of minimum 50000 Burning Hours with, 70% of initial Lumen maintained till life ends ,CCT 3000°K / 4000°K / 5700°K /6500°K (As per ANSI Bin), SDCM(Standard Deviation Colour Matching) <3, Maximum power consumption should not more than the specified rating and Fixture shall be of relevant BIS standard.	Each	22.00		
34	Supplying, installation, Testing & Commissioning of Panel light 2x2 ft., of 36Watts body material and construction as per IS : 10322 with driver as per the requirement with Driver efficiency >85%, Operating voltage AC 140-270 Volt, frequency 50/60 hz, Operating temp range -5 0C to 40 0C, internal surge protection of 2.5 KV with Short & Open circuit protection, THD < 10% , P. F.≥0.95, IP20, CRI >80, UGR (Unified Glare Rating) < 19, Flicker free, (flicker should be below 5 %), life time (LED, Driver & electrical circuitry), of minimum 50000 Burning Hours with, 70% of initial Lumen maintained till life ends as per LM80 extrapolation IES TM-21-11 report, CCT 3000°K / 4000°K / 5700°K /6500°K (As per ANSI Bin), SDCM(Standard Deviation Colour Matching) <3, Maximum power consumption should not more than the specified rating and Fixture shall be of relevant BIS standard. Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing. complete in all respect i/c external connections with 1.5 sq mm FRLS/HEFER PVC insulated conpper	Each	112.00		

35	Supply and installation of following sweep/ sizes metallic blade, heavy duty, single phase, 230 V A.C. Exhaust Fan in existing opening including making good the damage, connection, testing and commissioning etc as required. 300 mm sweep	Each	8.00		
36	Supply and installation of 450 mm, 230 V A.C. Metallic wall/cabin fan including fixing the bracket, making connection, testing, commissioning etc as required	Each	52.00		
37	Supplying and fixing of 9/10 watt LED lamp types lamp in the existing electrical fitting/ fixtures etc. as required	Each	15.00		
38	Supplying and fixing call-bell modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.	Set.	4.00		
SUPPLY & LAYING MAIN & SUBMAIN OF CABLE)					
39	Supply of following sizes and core PVC/XLPE insulated, PVC sheathed (heavy duty) armoured electrical power cable with aluminium conductor for working voltage upto 1.1 KV as required.				
	240 sq. mm, 3.5 core (L.T. MAIN LINE)	Metre	190.00		
	35 sq. mm, 3.5 core (OUT-DOOR A.C MAIN LINE)	Metre	135.00		
	70 sq. mm, 3.5core (UPS- PRIMARY & SECONDARY MAIN)	Metre	40.00		
40	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc. as required.				
	Upto 35 sq. mm	Metre	55.00		
	Above 35 sq. mm and upto 95 sq. mm.	Metre	60.00		
	Above 185 sq. mm and upto 400 sq. mm	Metre	150.00		
DATA CABLE FOR COMPUTER WIRING)					
42	S/I/T/Commissioning of 30 Kva UPS- PRIMARY & SECONDARY consist of:-125Amps TPN incomer MCB with 60 amps TPN conecter and outgoing 2 Nos 32Amps SPN power socket in MS Enclosure box as required, all complete as per instructions of Bank / Architect.	Set.	1.00		
43	S/I/T/Commissioning of 2 Meter Patch Cord as required, all complete as per instructions of Bank / Architect.	Each	115.00		
44	Supplying/fixing of Cat-6 wire with 20mm. dia PVC/G.I pipe all complete or as per instruction Ele.Er./Architect	Metre	4278.00		
45	Supply & Fixing of RJ 45 in I.O. box & jack from Net-working switch Hub in each computer set all complete as per instnction of Ele.Er./Arch.	Each	112.00		
46	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.	Each	112.00		
47	S/I/T/C of CAT-6- 64 Port Switch.hub-Make-D-LINK.	Set.	2.00		
48	S/I/T/C of CAT-9 U Jack Panel set all complete as per instnction of Ele.Er./Arch..	Set.	2.00		
49	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.	2.00		
50	S/I/T/C of 25 mm dia PVC pipe for wiring of voice data cable all complete as per instnction of Ele.Er./Arch..	Mts.	300.00		
WIRING FOR VOICE (TELEPHONE)					
51	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.	111.00		
52	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	111.00		

53	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.	111.00		
55	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.	3516.00		
		Grand Total Amount (in Rs)			
	NOTE- USE ALL PVC PIPE AND WIRE ARE FRLS ONLY OF BRANDED MAKE				
	GST WILL BE EXTRA AS APPLICABLE				