

[Validate](#)[Print](#)[Help](#)[Item Rate BoQ](#)Tender Inviting Authority: **Chairperson, I-CDC**Name of Work: **Electrical work (Renovation) of Workshop building at IPR campus, Bhat, Gandhinagar**Contract No: **IPR/TN/ELEC/01/2022**

Name of the Bidder/ Bidding Firm / Company :

**PRICE SCHEDULE****(DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY)****(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )****"Note:-**

- 1. For detailed Specification, Contractor has to refer and follow Specifications available in tender document, including material, workmanship, equipment's, IS code etc.**
- 2. All the items are including scaffolding, curing, for all leads and lifts etc.**
- 3. In case of non-availability of detailed specification, Specification of the same shall be executed as per clauses mentioned in GCC and / or as directed by Engineer-In-Charge, whose decision shall be final. No extra shall be payable for execution of items as mentioned in Schedule of Quantities as a result of adopting detailed specification or India Standard of relevant or Other Standards thereon.**
- 4. All respective items should be as per the approved make / brands / list attached in Tender document"**

NUMBER #	TEXT #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Item Code / Make	Quantity	Units	RATE In Figures To be entered by the Bidder in Rs. P including GST & all taxes	TOTAL AMOUNT Including GST & all Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	7	14	15
1.0	<b>Electrical panels:</b> Design, Engineering, Manufacture, Assembly, Factory Testing, Supply, Storage, Installation, Site Testing and Commissioning etc complete as per applicable IS / IEC Standards, of front operated, indoor, cubicle type, free standing, LT panels suitable for operating on 415 V +/-10%, Three Phase, 4 wire, 50 Hz +/-3%, AC supply system and to with stand a short circuit level of 65/50/35/25/16/10 KA rms symmetrical, as applicable. The scope of work includes all the materials, works, testing and commissioning as specified below and as directed / instructed by Engineer-in-Charge.	1.0					

2.0	<p>MAIN LT PANEL In Coming: 630 Amp. FP MCCB (50 KA) - 1 No. Bus-bar: 630 Amp FP Electrical grade Copper Bus bars : 1 Set. CU flat earthing bus of 40x6mm Out going: 250 AMP. FP MCCB - 36 kA - 2 Nos. 200 AMP. FP MCCB - 36 kA - 1 Nos. 125 AMP. FP MCCB - 25 kA - 5 Nos. 100 AMP. FP MCCB - 25 kA - 4 Nos. 63 AMP. FP MCB - 16 kA - 4 Nos. 32 AMP. FP MCB - 16 kA - 2 Nos. Metering, Protection &amp; Indication: Digital Multi Function meter with RS 485 Port : 1 No. CT 630/5A, 10VA, CL-1 : 1 set.(3 Nos) Control MCB 6A Phase indication (RYB-ON-OFF-TRIP) LED type lamp with Control Fuse CLASS B TYPE 4 POLE SURGE ARRESTOR - 1 No.</p>	1.1	1.00	Nos.		0.00	INR Zero Only
3.0	<p>Equipment power Panel In Coming: 250 Amp. FP MCCB (25 KA) - 1 No. Bus-bar: 250 Amp FP Electrical grade Copper Bus bars : 1 Set. CU flat earthing bus of 25x6mm Out going: 63 AMP. FP MCB - 16 kA - 2 Nos. 40 AMP. FP MCB - 16 kA - 2 Nos. 32 AMP. FP MCB - 16 kA - 2 Nos. 16 AMP. FP MCB - 16 kA - 12 Nos.  Metering, Protection &amp; Indication: Digital Multi Function meter with RS 485 Port : 1 No. CT 250/5A, 10VA, CL-1 : 1 set.(3 Nos) Control MCB 6A Phase indication (RYB-ON-OFF-TRIP) LED type lamp with Control Fuse</p>	1.2	1.00	Nos.		0.00	INR Zero Only

4.0	<p><b>ITC of LT CABLES - Aluminum/copper Conductor, XLPE Insulated, Armoured Cables of following Specifications &amp; sizes :</b> Laying, Installation, Testing and Commissioning of 1.1 KV grade, 2C/3C/3.5C/4C, XLPE insulated of following sizes. The cable shall be laid in existing hume pipe below ground level or on wall / ceiling with clamps, or through RCC Hume Pipes / Ducts / sleeves / pipes / holes / cable trenches etc complete as required, but excluding the cost of excavation/back-filling and Cable Trays.</p> <p>The scope also includes making necessary holes in walls / ceilings / floors etc as required.</p> <p>Cable tag shall be provided and fixed on the cable at bothe the end of cable or as required.</p>	<b>2.0</b>					
5.0	3.5 Core x 240/300/400 Sq. mm Al. Arm. Cable	<b>2.1</b>	250.00	RMT		<b>0.00</b>	INR Zero Only
6.0	3.5 Core x 25 Sq. mm Al. Arm. Cable	<b>2.2</b>	50.00	RMT		<b>0.00</b>	INR Zero Only
7.0	<p><b>END TERMINATION OF LT CABLES:</b> Supply, Installation, Testing and Commissioning(SITC) of End Connection and Termination of cable, 2/3/3.5/4 core, 1.1 KV grade, FRLS, PVC / XLPE insulated, armoured / Un-armoured, Copper / Aluminium conductor cables, including supply of whether proof Double compression brass cable glands for outdoor and single compression brass cable glands for indoor, Lugs, neoprene bushes, insulation tapes and other materials of approved make and tools as required complete with terminal connections, earthing of glands as required to complete the work in all respret and as directed by Engineer - in - Charge.</p>	<b>3.0</b>					
8.0	240/300/400 Sq. mm	<b>3.1</b>	4.00	Nos.		<b>0.00</b>	INR Zero Only
9.0	25/35 Sq. mm	<b>3.2</b>	4.00	Nos.		<b>0.00</b>	INR Zero Only
10.0	<b>CABLE TRENCH</b>	<b>4.0</b>					
11.0	Excavation and back filling of under ground cable trenches of required width and depth. The scope includes excavation for cables as instructed by EIC and also as per the cable routing, backfilling after cable laying, ramming, dressing, watering, compacting of earth etc and making the complete site good and clean, removal of debris etc complete as per instruction and direction of Engineer-in-Charge.	<b>4.1</b>	15.00	CUM		<b>0.00</b>	INR Zero Only
12.0	Supplying & spreading fine sand for a thickness of 100mm x width 300mm and providing and laying half round of 100mm width and 1 mtr length to cover the cable.	<b>4.2</b>	50.00	RMT		<b>0.00</b>	INR Zero Only
13.0	<b>Fabrication</b>	<b>5.0</b>					

14.0	Supply and fabrication and installation of Mild steel, in required shapes, sizes and configuration as required for cable/cable tray/panels/DBs etc. support on panel/floor/wall with anchor fastener/nuts and bolts including welding/cutting/grinding etc. as required to complete the job using ISA/ISMC/MS flat/MS plate as required/directed. The job also includes to paint the structure after surface cleaning with two coats of zinc chromate primer and two coat color of enamel paint as per the shade approved/suggested by Engineer in-Charge.	5.1	50.00	Kg		0.00	INR Zero Only
15.0	<b>ETPN/VTPN MCB Distribution Board:</b> SITC of following <b>ETPN PPI Double Door, DBs</b> , as per IS 8623, dust and vermin protected, rated for 440V, 3 phase, 50 Hz AC supply operation, with neutral link & Earth Link with required out goings, cable kits, DIN bar, Fully Factory fabricated and Powder coated suitable for incorporating SP/DP/ TP/FP MCB as specified below including necessary adaptor boxes for incoming and out going cables/ wires, but excluding supply of MCBs. The scope also includes all hardware, anchor-fasteners, clamps etc as required for installation of the DBs. Frames required for installation shall be measured and paid as per separate item of the tender.	6.0					
16.0	SITC of TPN MCB DB as per Item no. 2.0 above, suitable for 16 Amp/ 32 Amp/ 63 Amp FP MCB as incoming control and 12 ways / phase - 6/10/16/20//25/32 Amp SP/ DP/ TP/ FP MCBs as out going.	6.0.1	2.00	Nos.		0.00	INR Zero Only
17.0	<b>MCB,RCCB, MCCB:</b> SITC of MCB, 10 KA breaking capacity with Overload and Short Circuit protection, as per IS/IEC 60898 B/C curve of specified ratings. The MCBs are to be installed in the DBs/Enclosure, including necessary connections/terminations, but excluding the DBs / Enclosures.	6.1					
18.0	SITC of Single Pole(SP) MCBs as per Item No. 3.00 above, of capacity 6A /10A / 16A / 20A / 25A / 32A	6.1.1	72.00	Nos.		0.00	INR Zero Only
19.0	SITC of Double Pole(DP) MCBs as per Item No. 3.00 above, of capacity 6A / 10 A / 16A / 20A / 25A / 32A	6.1.2	10.00	Nos.		0.00	INR Zero Only
20.0	SITC of Four Pole(FP) MCBs as per Item No. 3.00 above, of capacity 6A / 10 A / 16A / 20A / 25A / 32A.	6.1.3	15.00	Nos.		0.00	INR Zero Only
21.0	SITC of Four Pole(FP) MCBs as per Item No. 3.00 above, of capacity 40 A / 50A / 63A.	6.1.4	25.00	Nos.		0.00	INR Zero Only

22.0	<b>SITC of 2 Pole Residual Current Operated Circuit Breaker RCCB/ELCB:</b> Supply, Installation, Testing and Commissioning (SITC) of 2 Pole, Residual Current Operated Circuit breaker(RCCB)/ Earth Leakage Circuit Breaker (ELCB), rated for 230V, 50 HZ, single phase, AC Supply, Residual current device type, with trip free mechanism, terminals suitable for aluminium/copper cable termination, terminal covers, entry terminals, test buttons and positive contact indication of specified leakage current tripping sensitivities and operating time less than 30 milli-sec. The RCCB shall be ISI marked - IS 12640 with latest amendments. complete as required. The RCCB is to be installed in the DBs / Enclosure, including necessary connections / terminations, but excluding the DBs / Enclosures.Type of RCCB/ELCB shall be Type A (AC - Duty) as per IS:12640 Part-1)	<b>6.2</b>					
23.0	SITC of RCCB/ELCB as per Item No. 7.00 above, rated for 40 Amp. Two Pole, 100mA sensitivity.	<b>6.2.1</b>	3.00	Nos.		<b>0.00</b>	INR Zero Only
24.0	SITC of RCCB/ELCB as per Item No. 7.00 above, rated for 63 Amp. Two Pole, 100mA sensitivity.	<b>6.2.2</b>	3.00	Nos.		<b>0.00</b>	INR Zero Only
25.0	<b>MCB Enclosure</b>	<b>6.3</b>					
26.0	supply pf MCB enclosure with 14/16 SWG CRCA sheet steel, dust and vermin protected, fully fabricated and powder coated suitable for incorporating DP MCB as specified below, excluding supply of MCB as directed by EIC or his representative.	<b>6.3.1</b>	5.00	Nos.		<b>0.00</b>	INR Zero Only
27.0	supply pf MCB enclosure with 14/16 SWG CRCA sheet steel, dust and vermin protected, fully fabricated and powder coated suitable for incorporating FP MCB as specified below, excluding supply of MCB as directed by EIC or his representative.	<b>6.3.2</b>	20.00	Nos.		<b>0.00</b>	INR Zero Only

28.0	<p><b>Point wiring:</b> The scope for each item of Point Wiring, includes Supply, Installation, Testing and Commissioning, including supplying all materials like Switches, Sockets, MS/PVC Box, Wires, Conduits &amp; accessories, junction boxes, Hardwares, saddles &amp; clamps, connectors, neutral links, ferrules, Cu lugs, Insulating Tapes, Identification Labels etc and all works like laying / jointing / clamping of conduits, drawing of wires, installation of switch-boards, etc complete and testing &amp; commissioning complete as per Instruction &amp; Direction of Engineer-in-Charge or his authorized representative/s. Further, the scope for unit rate of each item of Point Wiring also includes,</p> <p>Supply &amp; Laying of 25mm wide (inner), MMS, Electrical grade, ISI marked PVC Conduits/casing capping in Wall/floor with accessories, hardware, etc. complete. The conduit/casing capping shall be run on wall/ceiling/column/beams as per site conditions maintaining line and level as well as good workmanship and as instructed &amp; directed by Engineer-in-Charge or his authorized representative/s.</p> <p>Supply &amp; Wiring with 1100 volt grade ISI marked PVC - FRLS insulated (IS 694 with latest amendments) wires having flexible (multi strands) copper conductors.</p>	7.0					
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29.0	<p>Supply &amp; installation of modular type, ISI marked Switches, ISI marked (IS-1293) Sockets, MS/PVC Box with its necessary accessories, including connectors, brass chromium/cadmium plated screws, complete as required to complete the work.</p> <p>Making zurry in wall/floor/column etc. filled with mortar, apply chicken mesh on filled zurry will be in the scope of work of contractor. Zurry shall be made by cutter only as per required size with good workmanship.</p> <p>All the wiring &amp; conduiting, from Distribution Boards to Switch boxes for Circuit Mains, form Switch boxes to switch boxes for Sub Circuit Mains, and from Switchboard to outlet Light/Fan/Power Points etc complete as required.</p> <p>The size of the wires shall be as follows : 3 nos. separate wires shall be drawn for Phase, Neutral and Earth for each point from the Switch Board to the Outlet Points and for secondary points also.</p> <p>(a) From DB to Switch board (Lighting switch board): 2.5 Sq.mm flexible Cu wires for Phase &amp; Neutral, and 1.5 Sq. mm flexible cu wires for earth.</p> <p>(b) For Light and 6A Switch-Socket Points : From Switch Board to Outlet Point : 1.5 Sq.mm flexible Cu wires for Phase / Off, Neutral, and Earth, 3 nos. separate wires for each point.</p>	7.0.a					
30.0	<p>(C) For 6/16A Socket Points : From Distribution Board to Outlet Point : 2.5 Sq.mm flexible Cu wires for Phase / Off, Neutral, and 1.5 Sq.mm. Flexible Cu. Wires for Earth, 3 nos. separate wires for each point.</p> <p>(D) For 16A Socket Points (for AC and special purpose): From Distribution Board to Outlet Point : 2.5 Sq.mm flexible Cu wires for Phase / Off, Neutral, and 2.5 Sq.mm. Flexible Cu. Wires for Earth, 3 nos. separate wires for each point.</p>	7.0.b					
31.0	<p><b>Primary Point:</b> Point Wiring for Primary Point complete as per Item No. 7.00 above with 10A SP MCB for control and as directed by Engineer in Charge or his representative.</p>	7.1	10.00	Nos.		0.00	INR Zero Only
32.0	<p><b>Secondary point wiring:</b> Point Wiring for Secondary Point, looped from the adjacent primary points complete as per Item No. 7.0 above, but without MCB and as directed by Engineer in Charge or his representative.</p>	7.2	10.00	Nos.		0.00	INR Zero Only

33.0	<b>Fan point:</b> Point wiring complete as per item no.7.0 but with 120w hume free step type fan regulator with required fixing accessories (i.e. Fan hook, etc.) complete in all respect and as directed by Engineer-in -Charge.	7.3	4.00	Nos.		0.00	INR Zero Only
34.0	<b>Exhaust Fan point:</b> Point wiring complete as per item no.7.0 but for exhaust fan with 10A SP MCB complete in all respect and as directed by Engineer-in -Charge.	7.4	10.00	Nos.		0.00	INR Zero Only
35.0	<b>6A plug point on switch board:</b> Point Wiring complete as per item No. 7.00 above, but for 6A one-way Modular type Switch and 6A, 5 pin Socket, installed in and wired from the Lighting Switch Board.	7.5	5.00	Nos.		0.00	INR Zero Only
36.0	<b>1 Nos. 6A Switch socket plug point at Separate Location:</b> Point Wiring complete as per item No. 7.00 above but for 1 Nos. 6A modular switches, 5 pin universal Socket including cover plate, suitable size MS box etc. complete in all respect as directed by Engineer in Charge or his representative.	7.6	5.00	Nos.		0.00	INR Zero Only
37.0	<b>2 Nos. 6A Switch socket plug point:</b> Point Wiring complete as per item No. 7.00 above but for 2 Nos. 6A modular switches, 5 pin Socket including cover plate, suitable size MS box etc. complete in all respect as directed by Engineer in Charge or his representative.	7.7	10.00	Nos.		0.00	INR Zero Only
38.0	<b>1 Nos. 6A &amp; 1 Nos. 16A Switch socket combined plug point:</b> Point Wiring complete as per item No. 7.00 above but for modular 1 Nos. 16 A and 1 Nos. 6A, 5 pin Socket including cover plate, suitable size MS box etc. complete in all respect as directed by Engineer in Charge or his representative.	7.8	10.00	Nos.		0.00	INR Zero Only
39.0	<b>16A plug point (For Special purpose):</b> Point Wiring complete as per item No. 7.00 above, with 16A modular type Switch and 16A Socket including screws, cover plate, MS box etc. complete in all respect as directed by Engineer in Charge or his representative.	7.9	10.00	Nos.		0.00	INR Zero Only
40.0	<b>Light fixtures Accessories and Fans</b>	8.0					
41.0	Supply, assemble, installation, connection, testing and commissioning of 120W highbay type LED light fixtures, 5700K, having system lumen output $\geq$ 130 lm/W, useful LED life L70B50 $\geq$ 50000 hrs, IP 65, suitable to double hight area with in built surge protection, necessary fixing accessories, connection with flexible copper conductor wire, Earthing Connection to each fittings & fixtures, necessary hardware etc. as required and directed by Engineer-in-Charge or his representative. Similar to Wipro make UNO LH21-192-060-57-XX from the approved makes.	8.1	12.00	Nos.		0.00	INR Zero Only



42.0	Supply, assemble, installation, connection, testing and commissioning of 20W four feet IP 65 weather proof LED light fixture with LED rod, surface mounted, connection with flexible copper conductor wire, Earthing Connection to each fittings & fixtures, necessary hardware etc. as directed by Engineer-in-Charge or his representative.	8.2	7.00	Nos.		0.00	INR Zero Only
43.0	Supply, assemble, installation, connection, testing and commissioning of 40W four feet batten type LED light fixture, surface mounted, connection with flexible copper conductor wire, Earthing Connection to each fittings & fixtures, necessary hardware etc. as directed by Engineer-in-Charge or his representative.	8.3	10.00	Nos.		0.00	INR Zero Only
44.0	Supply, Installation, Testing and commissioning of 600mm sweep, 900 rpm, Heavy duty, totally enclosed motor type exhaust fan suitable for operation on 230V, 50 Hz single phase AC supply complete with 3 core copper conductor cable, bird net with rubber mountings and conforming to IS- 2312 (with latest amendment) including required fixing accessories, hardwares, etc. as directed by Engineer-in-Charge or his representative.	8.4	2.00	Nos.		0.00	INR Zero Only
45.0	<b>Cable Management:</b> Supply and laying of PVC cable management system consisting of snap-fit lids with 50mm deep cable divider and allied accessories such as internal tees, external tees, flat tees etc. Scope of work also including supply of all fixing accessories to complete the work in all manner as directed by Engineer-in-Charge or his representative.	9.0					
46.0	100X50 mm	9.0.1	100.00	Rmt		0.00	INR Zero Only
47.0	<b>Copper Plate Earthing:</b> SITC of 600x600x3.15mm electrolytic copper plate Earthing Stations, connected with 40x6mm electrolytic copper strip up to the earthing chamber including supply of all materials like GI Pipes, Charcoal, Salt, funnel, 300x300mm size CI Cover for the chamber, all hardware & accessories etc complete and all the works like excavation, back-filling, making the chamber, connections etc complete as per IS:3043 and as instructed and directed by Engineer-in-Charge.	10.0					
48.0	SITC of plate Earthing Station as per item above, with 3.5 mt depth	10.0.1	2.00	Nos.		0.00	INR Zero Only
49.0	<b>Equipotential Bar / Test Link:</b> Supply, Installation, Testing and Commissioning of <b>below mentioned</b> Equipotential bar with installed with epoxy support Insulators, to inter connect different earthing conductors. The bar shall be provided with six holes for connecting the equipment to earthing station.	10.1					
50.0	SITC of 25x6mm Cu. Test link (300 mm Long) of required size as per Item above.	10.1.1	1.00	Nos.		0.00	INR Zero Only

51.0	<b>COPPER EARHTING STRIP:</b> Supply, Laying, Testing and Commissioning of ETP grade as per IS 191, Copper Strip of following sizes, including supply and fixing using MS / Aluminium spacers, saddles, with all fixing materials as required when laid inside the building, and inclusive of excavation and refilling of earth when laid out side the building, termination/ interconnections in an approved manner as per the IS 3043 (with latest amendments) inclusive of supply of all hardwares complete as required. Item includes supply & Fixing of AMC / FRP spacer / supports used for fixing earthing strip as per requirement as directed by Engineer-in-Charge or his representative.	10.2					
52.0	SITC of 25mm x 3 mm Copper Earth Strip as per Item above.	10.2.1	40.00	RMT		0.00	INR Zero Only
53.0	<b>SITC of Copper Earthing Wires / Cables :</b> Supply and laying of ETP grade as per IS:191 copper wire of following sizes including supply and fixing of clamps and accessories when laid inside the building and inclusive of excavation and refilling of earth when laid out side the building, terminations / interconnections in an approved manner as per the IS 3043 (with latest amendment) inclusive of supply of all hardware complete as required, and as instructed & directed by Engineer-in-Charge.	10.3					
54.0	SITC of 10 SWG Copper Wire as per item above.	10.3.1	30.00	RMT		0.00	INR Zero Only
<b>Total in Figures</b>						<b>0.00</b>	INR Zero Only
<b>Quoted Rate in Words</b>	<b>INR Zero Only</b>						