

**UNIVERSITY OF KERALA  
ENGINEERING UNIT, KARIAVATTOM**

<b>Tender Schedule for Providing out door feeder pillar box (electricity) near 11 KV substation at Kariavattom campus(Retender)</b>							
Sl. No	Qty	Specification	Unit	Rate		Amount	
1		Fabrication, supply, conveyance, installation testing and commissioning of floor mounting, dust and vermin proof, cubicle type MV panel board comprising of the following components/ devices & complying to IS 8623.					
a	13	m2	Fabrication, supply, conveyance, installation, testing and commissioning of fully partitioned, dust and vermin proof floor mounting type enclosure for panel assembly as per form 4 of IS 8623 (with latest amendments) using 2.00 mm CRCA sheet as per approved design and requirement, with front access facility, bus bar chambers, hinged doors for all switch gear compartments and TOTATLY ENCLOSED hinged doors at entire portion of the front side for water tight arrangements, copium at top earthing the doors using 4 sq mm braided copper conductor, providing necessary cut-outs for mounting meters, relays, indication lamps, bus bar interconnection etc, detachable covers for bus bar chamber and cable alley, powder coating the assembly after subjecting to 7 tank process etc as required. CRCA sheet alone be used for the fabrication. Angles/ flats/ slotted angles etc shall not be used for the fabrication of panel assembly. The measurments should be taken the area of the complete sheets used for panel board including partitions, folding, shrouding etc. including control wiring ( <b>Out door type railway pattern</b> )	m2	2473.00	Rupees Two thousand four hundred and seventy three only	32149.00

2		Supply and providing the following size of <i>SMC sheets</i> in the panel as barriers & shrouding using required bolts and nuts including cutting to shape etc., as required.				
a	1 m <sup>2</sup>	2 mm thick	m <sup>2</sup>	3184.00	Rupees Three thousand One hundred and seventy Eighty Four only	3184.00
3		Supply and fixing the following types of <i>beeding</i> along the periphery of doors/ other detachable compartments to make the panel assembly dust & vermin proof including sticking with glue				
a	20 m	U' section rubber beeding suitable for 1.60/ 2.00 mm sheet	m	8.00	Rupees Eight only	160.00
4	4 m	Fabrication, supply, conveyance and installation of <i>base frame</i> for floor mounting type panel board using channel of class designation ISMC 75 including cutting, welding, drilling holes, painting with two coats of synthetic enamel paint over a coat of zinc chromate primer, bolting the frame to the panel and to the finished floor using required bolt and nuts, making good the damages etc. as required.	m	807.00	Rupees Eight hundred and seven only	3228.00
5	6 kg	Fabrication, supply, conveyance and installation of <i>angle iron frame work</i> for wall mounting panel board using suitable size angle iron cut and welded to shape including painting with two coats of synthetic enamel paint over a coat of zinc chromate primer, bolting the frame to the panel using required bolt and nuts, fixing the whole to the wall, making good the damages etc. as required.	kg	126.00	Rupees One hundred and Twenty Six only	756.00
6	6000 cm <sup>3</sup>	Fabrication, supply & fixing main <i>bus bar system</i> and interconnections with electrolytic grade <i>copper</i> strips/ rigid conductors conforming to IS 1867 (with latest amendments) for bus bar arrangement with <i>single strip per phase</i> supported on finger type bus bar supports of adequate size, spacing between supports not exceeding 50 cm & overhang not exceeding 5 cm including bending to shape, drilling holes, tinning the points of contacts, fixing heat shrinkable PVC sleeves, plated bolts and nuts with plate washers and spring washers, copper sockets for round conductors, etc., as required.	cm <sup>3</sup>	7.30	Rupees Seven & ps Thirty only	43800.00

7	350	cm <sup>3</sup>	Fabrication, supply & fixing <i>earth bus</i> system with <i>copper</i> strip/ conductor and connecting all accessories as per rule including g tinning the points of contacts etc as required	cm <sup>3</sup>	6.90	Rupees Six & ps Ninety only	2415.00
8	1	nos	Incoming:-400A , 70 kA (Ics=100%Icu), 4 pole, current limiting type MCCB with microprocessor based release with thermal setting of 50 - 100% having adjustable OL & SC	E	42614.00	Rupees Forty two thousand Six hundred and Fourteen only	42614.00
9	3	nos	250 A, 35/36 kA (Ics=100%Icu), 3 pole, current limiting type MCCB with microprocessor based release with overload setting of 50 - 100% having adjustable OL & SC	E	17518.00	Rupees Seventeen thousand Five hundred and Eighteen only	52554.00
10	3	nos	100A, 35/36 kA (Ics=100%Icu), 3 pole, current limiting type MCCB with microprocessor based release with overload setting of 50 - 100% having adjustable OL & SC	E	9345.00	Rupees Nine thousand Three hundred and Forty Five only	28035.00
11	7	nos	Rotary kit	E	1685.00	Rupees One thousand Six hundred and Eighty Five only	11795.00
12	3	nos	Single phase ammeter of accuracy class 0.50	E	1271.00	Rupees One thousand Two hundred and Seventy One only	3813.00
13	1	no	Three phase volt meter (V - RY, YB, BR, R, Y, B) of accuracy class 0.5	E	1683.00	Rupees One thousand Six hundred and Eighty Three only	1683.00
14	1	no	5 A 3 pole voltmeter selector switch to read voltage between 3 phases.	E	157.00	Rupees One hundred and Fifty Seven only	157.00
15	3	nos	LED indicators for all voltage ranges - Red, Green, Black, Yellow or Orange Colour	E	123.00	Rupees One hundred and Twenty Three only	369.00
16	3	nos	400/ 5 A, 5 VA, resin cast metering CT of accuracy class 0.5	E	1026.00	Rupees One thousand and Twenty Six only	3078.00
17	3	nos	Aluminium anodised Danger Notice Board of size 200 x 150 mm. with inscriptions ( both in English and Malayalam) and conventional Skull and Bone in Red colour.	E	126.00	Rupees One hundred and Twenty Six only	378.00
18	1	no	Aluminium anodised legend plate of size 100 x 40 mm. with inscription of BUS BAR CHAMBER .	E	34.00	Rupees Thirty Four only	34.00
20	6	no	16A,415V,HRC type Kit kat fuse unit	E	88.00	Rupees Eighty Eight only	528.00
21			Supply & laying of one number PVC insulated and PVC sheathed armoured aluminium power cable of 1.1KV grade of the following sizes in the existing RCC/ HUME / STONE WARE/ GI/ DWC pipe as required.				

a	60 m	4 core 185 sq mm	m	1117.00	Rupees One thousand One Hundred and Seventeen only	67020.00
b	110 m	4 core 70 sq mm	m	530.00	Rupees Five hundred and Thirty only	58300.00
22		Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armoured aluminium power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages , colour washing etc. as required.				
a	5 m	4c 70 sqmm	m	548.00	Rupees Five hundred and Forty Eight only	2740.00
23		Supply & laying of DWC pipe in <b>ordinary soil 0.75 m</b> below ground level including excavation				
	60 m	63 / 50 mm or nearest size	m	160.00	Rupees One hundred and Sixty only	9600.00
	50 m	90 / 75 mm or nearest size	m	237.00	Rupees Two hundred and Thirty Seven only	11850.00
24	8 nos	Supply route marker with 102mmx102mm <i>cast iron, spike</i> 5mm thick with inscription ' <i>LT Cable</i> ' there on bolted / welded to 35x35x6mm angle iron 60cm long and fixing the same in ground as required.	e	194.00	Rupees One hundred and Ninety Four only	1552.00
25		Supplying siemens / tropodur type nickel plated <i>Double compression brass cable gland</i> for PVC insulated and PVC sheathed armoured aluminium/ copper conductor cable 1.1 KV grade, and making end termination suitable for 2/ 3/ 3½/ 4 core cable of the following sizes as required.				
a	4 nos	70 sq mm	E	714.00	Rupees Seven hundred and Fourteen only	2856.00
c	4 nos	185 sq mm	E	1164.00	Rupees One thousand One Hundred and Sixty Four only	4656.00
26	nos	Supplying and providing <i>earth clamps</i> for siemens/ tropodur type cable glands of suitable length and other dimensions noted along with each size of glands for the following sizes of cables as required.				

a	4 nos	25 sq - 95sq mm with 20 mm wide x 1.20 mm thick clip	E	27.00	Rupees Twenty Seven only	108.00
27		Supplying and providing <i>earth clamps made out of copper strips</i> of the following sizes including cutting and bending the flat exactly to the shape of the gland, drilling necessary holes for nut & bolt, tinning the points of contacts and giving connections to the main earthing system as required.				
a	4 nos	20 x 3 mm for earthing glands of size 120 sq mm to 185 sq mm	E	99.00	Rupees Ninety Nine only	396.00
28	nos	Supply of superior quality <i>aluminium tubular cable socket</i> and making core termination of cables of the following sizes including crimping etc. as required.				
a	16 nos	70 sq mm	E	24.00	Rupees Twenty four only	384.00
b	16 nos	185 sq mm	E	56.00	Rupees Fifty Six only	896.00
29		Supply and laying <i>strips</i> of the following sizes <i>along with wiring/ cables</i> and giving connection as required.				
a	60 m	25 x 3 mm copper strip tinned at the points of contacts	m	482.00	Rupees Four hundred and Eighty Two only	28920.00
30		Supply and providing the following sizes of <i>bolt and nut</i> with washers on the existing MS box / earth bus etc. as required including drilling necessary holes as required				
a	15 nos	25 x 6 mm brass bolt & nut	E	20.00	Rupees Twenty only	300.00
31	1.5 m <sup>2</sup>	Cement concrete 1:2:4 using 20mm (nominal size) broken stone <i>for reinforced concrete work.</i>	m <sup>3</sup>	7186.63	Rupees Seven thousand One Hundred and Eighty Six and ps Sixty three only	10779.95
32	4 m <sup>2</sup>	Plastering with cement mortar 1:4, 12mm thick one coat.	m <sup>2</sup>	210.84	Rupees Two hundred and ten and ps Eighty Four only	843.36
33	2 m <sup>3</sup>	Earth work excavation in <i>ordinary soil</i> and depositing with a lead up to 50 m and lift up to 1.50 m including neat banking	m <sup>3</sup>	128.44	Rupees One hundred and Twenty Eight and ps Forty four only	256.88
34		Supply and clamping the following sizes of <i>PVC pipe</i> on wall with all required accessories including cutting and making good the walls, colour washing etc. as required as protective covering to cables.				
a	50 m	63 mm dia PVC pipe (8 Kgf/ cm <sup>2</sup> )	m	134.00	Rupees One hundred and Thirty four only	6700.00

35	1	no	Supply and fixing 400A TPN SDF in the existing LT panel board using suitable type bolt and nut with washers etc after dismantling the existing 250A TPN SDF and modification to the existing enclosure where ever necessary and giving connections as required	nos	14406.00	Rupees Fourteen thousand Four Hundred and Six only	14406.00
36	3	nos	S & F following 250 A, DIN type fuse link of size 1	nos	537.00	Rupees Five hundred and Thirty Seven only	1611.00
			<b>TOTAL</b>				<b>454905.19</b>

PAC Rs.4,54,905/- (Rs. Four Lakh Fifty Four thousand Nine hundred & Five only)

I/We agreed to execute the work.

1. ....% above the estimate rate.

2. ....% below the estimate rate.

3. At the estimate rate.

**CONTRACTOR**

**UNIVERSITY ENGINEER**

sd/-