

UNIVERSITY OF KERALA

ENGINEERING UNIT

Tender schedule Electrical works for Alteration works to the SEM Lab allotted for XRF in SICC building under Department of Geology at Kariavattom Campus(Retender)						
Sl. No	Qty	Specification	Unit	Rate	Rate in words	Amount
1		Supply and fixing the following sizes of <i>PVC Conduit</i> conforming to IS 9537 / 1983 part III along with all required accessories <i>on surface</i> including making good the damages etc as required.				
1.1	110	25 mm dia light gauge	m	95.00	Rs.Ninety Five only	10450.00
2		Supply and drawing 650/1100 V grade <i>PVC insulated stranded single core copper conductor cables</i> conforming to IS 694 part I 1990 in the existing surface / recess conduit as required including giving necessary connections of the following sizes.				
2.1	25	4.00 sq mm 4 run	m	184.00	Rs.One hundred & Eighty Four only	4600.00
2.2	60	6.00 sqmm 4run	m	260.00	Rs.Two hundred & Sixty only	15600.00
2.3	20	10.00 sq mm 4 run	m	426.00	Rs.Four hundred & twenty six only	8520.00
3		Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required				

3.1	1	4 way (8+12) - double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/ RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)	E	7739.00	Rupees Seven Thousand Seven Hundred and Thirty Nine Only	7739.00
4		Supply and installation of the following <i>accessories</i> suitable for 50 Hz , AC supply conforming to IS 8828-1995/ IEC 60898 of the following current ratings in the existing enclosure and giving connections as required				
4.1	1	40 A four pole mini break isolator	E	716.00	Rupees Seven Hundred and Sixteen Only	716.00
4.2	1	63 A, 4 pole, 100 mA RCCB	E	3306.00	Rs.Three thousand three hundred & six only	3306.00
5		Supply and installation of the following <i>accessories</i> suitable for 50 Hz , AC supply conforming to IS 8828-1995/ IEC 60898 of the following current ratings in the existing enclosure and giving connections as required				
		S & F TP MCB				
5.1	3	32A	E	908.00		2724.00
5.2	1	40 A, 10 kA, TP MCB (C curve)	E	1369.00	Rs.One thousand three hundred & sixty nine only	1369.00
5.3	3	50 A and 63 A, 10 kA, TP MCB (C curve)	E	1369.00	Rs.One thousand three hundred & sixty nine only	4107.00

6		Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required				
6.1	4	FP enclosure for independent mounting of MCB/ RCCB/ RCBO	E	604.00	Rupees Six Hundred and Four Only	2416.00
7		Supply & Fixing the following types/ sizes of boxes suitable for modular accessories in surface/ recess including making good the damages, colour washing etc as required (ROHS)				
7.1	2	9 module moulded plastic box on surface	E	235.00	Rupees Two Hundred and Thirty Five Only	470.00
8		Supply & Fixing the following types/ sizes of front plates on the existing modular boxes. (RoHS)				
8.1	2	9 module white/ off-white	E	195.00		390.00
9		Supply and Fixing the following modular switches & accessories in the existing front plates and giving necessary connections as required (Group B)				
9.1	6	16 A SP 1 way switch	E	161.00	Rupees One Hundred and Sixty One Only	966.00
9.2	6	6/16 A socket	E	223.00	Rupees Two Hundred and Twenty Three Only	1338.00
		EARTHING & EARTH CONDUCTORS				

10	2	Supply and providing <i>plate earthing</i> as per IS 3043 with <i>600x600x6.30 mm GI/CI earth plate</i> , 20 mm GI watering pipe fixed to the earth plate with 20 x 3 mm GI clamps, GI funnel with weld mesh, filling required quantity of charcoal including construction of inspection chamber with a bed concrete of 1:4:8 PCC using 40 mm broken stone (10 cm thick), brick work in cement mortar 1:6, plastering the surface of brick masonry and the exposed surface of PCC bed with cement mortar 1:4, 12 mm thick, (the finished inside dimension shall be 300 x 300 x 300 mm) but excluding test joint, earth continuity conductor to the plate, and covering at the top. (in hard soil)	E	4102.00	Rs.Four thousand One hundred & Two only	8204.00
11	10	6.00 mm copper conductor (4 SWG)	E	189.00	Rupees One Hundred and Sixty One Only	1890.00
12		Supply and providing the following sizes of <i>cast iron gully trap with covering</i> at the top of the inspection chamber of earth pit as required				
12.1	2	300 x 300 x 6 mm cast iron gully trap with covering	E	267.00	Rupees Two Hundred and Sixty Seven Only	534.00
13		Supply and providing <i>test joint for the earthing system</i> using 2 Nos of the following sizes of strips including cutting and bending to shape, drilling necessary holes and fixed to the watering pipe etc as required.				
13.1	0.8	2 x 25 x 3 mm GI strip	m	165.00	Rupees One Hundred and Sixty Five Only	132.00
14		Supply and providing <i>earth lead from the test joint to the earth electrode</i> using the following sizes of conductors/ strips including cutting, drilling necessary holes (in case of strip) and fixing firmly with plate test joint etc as required.				
14.1	8	25 x 3 mm GI strip	E	73.00	Rupees Seventy Three Only	584.00

15		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				
15.1	20	25 x 6 mm GI bolt & nut	E	10.70	Rupees Ten and paise Seventy Only	214.00

16		Supply and drawing bare <i>earthing conductors</i> of the following sizes <i>along with wiring/ cables</i> and giving connection as required.				
16.1	10	2.00 mm copper conductor (14 SWG)	E	26.00	Rupees Twenty Six Only	260.00
		TOTAL				76529.00

PAC Rs.76,529/- (Rupees Seventy Six Thousand Five hundred & Twenty Nine only)

1. I/We agreed to execute the work.

2.% above the estimate rate.

2.% below the estimate rate.

3. At the estimate rate.

CONTRACTOR

sd/-
UNIVERSITY ENGINEER