

UNIVERSITY OF KERALA
ENGINEERING UNIT, KARIAVATTOM

Tender Schedule for standardization of main panel board in the Finance building at SH campus						
Sl. No	Qty	Specification	Unit	Rate		Amount
1		Fabrication, supply, conveyance, installation testing and commissioning of floor or wall mounting, dust and vermin proof, cubicle type MV panel board comprising of the following components/ devices & complying to IS 8623.				
a	8 m2	Fabrication of fully partitioned, dust and vermin proof enclosure for <i>panel assembly</i> as per form 4 of IS 8623 (with latest amendments) <i>using 2.00 mm CRCA sheet</i> as per approved design and requirement, with front and rear access facility, bus bar chambers, hinged doors for all switch gear compartments, 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, <i>powder coating</i> 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	m2	2473.00		19784.00
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	0.2 m2	2 mm thick	m2	3184.00	Rupees Three thousand One hundred and Eighty Four only	636.80

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				
a	20	m	U' section rubber beeding suitable for 1.60/ 2.00 mm sheet	m	8.00	Rupees Eight only	160.00
4	10	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	1260.00
5	2000	cm	Fabrication, supply & fixing main bus bar system 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 ³	7.30	Rupees Seven & ps Thirty only	14600.00
6	300	cm	Fabrication, supply & fixing earth bus system with <i>coppe</i> r strip/ conductor and connecting all accessories as per rule including g tinning the points of contacts etc as required	cm ³	6.90	Rupees Six & ps Ninety only	2070.00
7	1	No	160 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	10730.00	Rupees Ten thousand Seven hundred and Thirty only	10730.00
8	6	No	16 A-100A, 25/35 kA (Ics=100%Icu), 3 pole, current limiting type MCCB having thermal setting range of 80 - 100% with thermal magnetic release having adjustable OL	E	5100.00	Rupees Five thousand One hundred only	30600.00
9	7	No	rotary kit	E	1685.00	Rupees One thousand Six hundred andEighty Five only	11795.00

10	1	No	Three phase multifunction meters to read V, A and F, accuracy class 0.5	E	3706.00	Rupees Three thousand Seven hundred and Six	3706.00
11	3	No	200/ 5 A, 5 VA, resin cast metering CT of accuracy class 0.5	E	1073.00	Rupees One thousand and Seventy Three only	3219.00
12	3	No	Three phase volt meter (V - RY, YB, BR, R, Y, B) of accuracy class 1	E	1683.00	Rupees One thousand Six hundred and Eighty Three only	5049.00
13	1	No	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	126.00
14	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
15	2	No	Aluminium anodised legend plate of size 100 x 40 mm. with inscription of CABLE ALLEY.	E	34.00	Rupees Thirty Four only	68.00
16	3	No	20A Kitkat fuse unit with 2A HRC fuse link	E	88.00	Rupees Eighty Eight only	264.00
17	2	No	6 way (8+18) - 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	8960.00	Rupees Eight thousand Nine hundred and Sixty only	17920.00
18			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				
a	2	no	63 A four pole mini break isolator	E	752.00	Rupees Seven hundred and Fifty two only	1504.00
b	2	No	40 A, 10 kA, TP MCB (D curve)	E	1487.00	Rupees One thousand Four Hundred and Eighty Seven only	2974.00
c	12	No	6-32A(C curve)	E	219.00	Rupees Two hundred and Nineteen only	2628.00

19			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	25	m	4 core 35 sq mm with factory made clamp	m	351.00	Rupees Five hundred and Forty Eight only	8775.00
20			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	No	25 sq - 95sq mm with 20 mm wide x 1.20 mm thick clip	E	27.00	Rupees One hundred and Sixty only	108.00
21			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.			Rupees Two hundred and Thirty Seven only	
a	4	No	35 sq mm	E	469.00	Rupees Four hundred and Sixty Nine only	1876.00
22			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	No	35 sq mm	E	16.00	Rupees Sixteen only	256.00
23			Supply and drawing bare <i>earthing conductors</i> of the following sizes <i>along with wiring/ cables</i> and giving connection as required.				0.00
a	50	m	3.15 mm copper conductor (10 SWG)	m	62.00	Rupees Sixty Two only	3100.00

24	I No	Dismandling the existing cubical type panel board with all accessories and conveying to the section store		1160.00	Rupees One thousand One hundred and Sixty only	1160.00
		TOTAL				144402.80

PAC Rs.1,44,403/- (Rs. One Lakh Forty Four thousand Four hundred & Three only)

I/We agreed to execute the work.

1.% above the estimate rate.

2.% below the estimate rate.

3. At the estimate rate.

CONTRACTOR

**sd/-
UNIVERSITY ENGINEER**