

University of Kerala
Engineering Unit, Kariavattom

Tender Schedule for the work of Providing plug points for connecting UPS , DNA Sequencer, HPTLC and LCMS in the SICC building -Vertical extension of second floor of science block building at Kariavattom campus using RUSA funds

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>in recess</i> including cutting the wall and making good the damages etc as required.				
1.1	10	m	20 mm dia light gauge	m	120.00	Rs.One hundred & twenty only	1,200.00
1.2	10	m	25 mm dia light gauge	m	133.00	Rs.One hundred & thirty three only	1,330.00
2			Supply and fixing <i>50 x 50 mm PVC Cable Management System</i> with base and lid along with the following accessories conforming to IEC 61084/ BS 476 & 4678 on surface / recess including cutting the wall and making good the damages in case of recessed installation as required.				
2.1	45	m	50 x 50 mm CMS with base & lid	M	537.00	Rs.Five hundred & thirty seven only	24,165.00

3			Supply and fixing <i>100 x 50 mm PVC Cable Management System</i> with base and lid along with the following accessories conforming to IEC 61084/ BS 476 & 4678 on surface / recess including cutting the wall and making good the damages in case of recessed installation as required.				
3.1	15	m	100 x 50 mm CMS with base & lid	M	935.00	Rs.Nine hundred & thirty five only	14,025.00
3.2	10	nos	Cable divider (2 M)	E	108.00	Rs.One hundred & eight only	1,080.00
3.3	4	nos	End Cap	E	92.00	Rs.Ninety two only	368.00
3.4	24	nos	1 to 3 module mounting box	E	143.00	Rs.One hundred & forty three only	3,432.00
3.5	4	nos	4 to 5 module mounting box	E	162.00	Rs.One hundred & sixty two only	648.00
4			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 <i>(Group B/ RoHS compliant)</i>				
4.1	4	nos	3 module metal box in recess	E	180.00	Rs.One hundred & eighty only	720.00
5			<i>Group B modular accessories - S & F front plates</i>				
5.1	28	nos	3 module white/ off-white	E	116.00	Rs.One hundred & sixteen only	3,248.00
5.2	4	nos	4 module white/ off-white	E	119.00	Rs.One hundred & nineteen only	476.00

6			Supply and Fixing the following modular switches & accessories in the existing front plates and giving necessary connections as required <i>(Group B RoHS compliant)</i>				
6.1	26	nos	6 A SP 1 way switch	E	119.00	Rs.One hundred & nineteen only	3,094.00
6.2	8	nos	16 A SP 1 way switch	E	161.00	Rs.One hundred & sixty one only	1,288.00
6.3	26	nos	6A 3 pin shuttered socket	E	157.00	Rs.One hundred & fifty seven only	4,082.00
6.4	8	nos	6/16 A socket	E	223.00	Rs.Two hundred & twenty three only	1,784.00
7			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				
7.1	1	no	DP enclosure for independent mounting of MCB	E	486.00	Rs.Four hundred & eighty six only	486.00
7.2	1	no	FP enclosure for independent mounting of MCB/ RCCB/ RCBO	E	604.00	Rs.Six hundred & four only	604.00
7.3	1	no	16 way single phase double cover (IP 42/43)	E	2347.00	Rs.Two thousand three hundred & forty seven only	2,347.00
7.4	2	nos	40 A double pole mini break isolator	E	356.00	Rs.Three hundred & fifty six only	712.00

7.5	1	no	40 A four pole mini break isolator	E	716.00	Rs.Seven hundred & sixteen only	716.00
7.6	1	no	40 A, 2 pole, 100 mA RCCB	E	2453.00	Rs.Two thousand four hundred & fifty three only	2,453.00
7.7	14	nos	6-32A SPMCB(C curve)	E	219.00	Rs.Two hundred & Nineteen only	3,066.00
7.8	1	no	40 A, 10 kA, TP MCB (C curve)	E	1369.00	Rs.One thousand three hundred & sixty nine only	1,369.00
8			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.				0.00
8.1	130	m	1.50 sq mm 3 run	m	77.00	Rs.Seventy seven only	10,010.00
8.2	50	m	1.50 sq mm 1 run	m	45.00	Rs.Forty five only	2,250.00
8.3	50	m	2.50 sq mm 2 run	m	81.00	Rs.Eighty one only	4,050.00
8.4	10	m	6.00 sq mm 1 run	m	87.00	Rs.Eighty seven only	870.00
8.5	40	m	6.00 sq mm 2 run	m	144.00	Rs.One hundred & forty four only	5,760.00
8.6	40	m	10.00 sq mm 4 run	m	426.00	Rs.Four hundred & twenty six only	17,040.00
8.7	10	m	10.00 sq mm 2 run	m	227.00	Rs.Two hundred & twenty seven only	2,270.00

9	2	nos	Supply and providing <i>plate earthing</i> as per IS 3043 <i>with 900x900x6 mm copper earth plate</i> , 40 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 450 x450x450 mm) but excluding test joint, earth continuity conductor to the plate, and covering at the top. <i>(in ordinary soil)</i>	E	20315.00	Rs.Two thousand three hundred & fifteen only	40,630.00
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10	2	nos	Supply and providing <i>plate earthing</i> as per IS 3043 <i>with 600x600x6.00 mm copper 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. <i>(in ordinary soil)</i>	E	14289.00	Rs.Fourteen thousand two hundred & eighty nine only	28,578.00
11			Supply and providing <i>RCC covering slab</i> constructed with the following for the inspection chamber of earth pit as required				
11.1	3.7	m3	Cement concrete 1:2:4 using 20mm (nominal size) broken stone for reinforced concrete work	m3	7186.63	Rs.Seven thousand one hundred & eighty six & ps. Sixty three only	26,590.53
11.2	10	kg	Reinforcement for R.C.C works , bend tied and placed in position (plain grill requiring bend cold) using Tor steel	kg	59.88	Rs.Fifty nine & ps. Eighty eight only	598.80
11.3	4	m2	Plastering with cement mortar 1:4, 12mm thick one coat.	m2	142.73	Rs.One hundred & forty two & ps. Seventy three only	570.92

12			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.				
12.1	1.2	m	2 x 25 x 6 mm tinned copper strip	m	1083.00	Rs.One thousand & eighty three only	1,299.60
13			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.				
13.1	16	m	25 x 6 mm copper strip tinned at the points of contacts	m	957.00	Rs.Nine hundred & fifty seven only	15,312.00
14			Supply and laying bare <i>earthing conductors</i> of the following sizes <i>laid 0.6 m below ground level including excavating trench</i> of suitable size and refilling etc. as required <i>(in ordinary soil)</i> .				
14.1	6	m	25 x 6 mm copper strip tinned at the points of contacts	m	983.00	Rs.Nine hundred & eighty three only	5,898.00
14.2	6	m	25 x 3 mm copper strip tinned at the points of contacts	m	505.00	Rs.Five hundred & five only	3,030.00

15			Supply and <i>clamping</i> the following sizes of <i>strips</i> on surface of wall/ parapet/ existing cable tray using clamps fabricated from 20 x 3 mm GI flat duly painted or heavy duty GI spacer saddles, spacing of clamps not exceeding 1m, making good the damages, colour washing etc. as required (<i>for vertical run</i>).				
15.1	40	m	25 x 3 mm copper strip tinned at the points of contacts	m	572.00	Rs.Five hundred & seventy two only	22,880.00
15	50	m	25 x 6 mm copper strip tinned at the points of contacts	m	1055.00	Rs.One thousand & fifty five only	52,750.00
16			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				
16.1	20	nos	25 x 6 mm brass bolt & nut	E	20.00	Rs.Twenty only	400.00
17			Supplying , threading , laying and jointing of the following sizes of 'B' class <i>GI pipe</i> with all required accessories <i>in ground in the existing trench</i> as protective covering to earth leads.				
17.1	6	m	40mm	m	231.00	Rs.Two hundred & thirty one only	1,386.00

18			Supplying, threading, laying, jointing & <i>clamping</i> of the following sizes of <i>PVC pipe</i> (8 Kgf/ cm ²) with all required accessories and clamp including cutting and making good the walls, colour washing etc. on surface of wall / parapet etc. as required.				
18.1	30	m	40 mm dia	m	71.00	Rs.Seventy one only	2,130.00
19	1	no	Supply and providing <i>2mm thick</i> Elastomeric fire retardent insulating mat as per IS 15652/2006 to withstand 3.3 KV dielectric strength.	m ²	1809.00	Rs.One thousand eight hundred & nine only	1,809.00
			Total				318,805.85

PAC Rs.3,18,806/- (Rs.Three lakhs eighteen thousand eight hundred & six 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

UNIVERSITY ENGINEER