

UNIVERSITY OF KERALA							
ENGINEERING UNIT, KARIAVATTOM							
Tender Schedule for the work of Electrification of newly constructed Auditorium at UIT Centre, Pirappancode.							
Sl.No.	Qty		SPECIFICATION	Unit	Rate	Rate in words	Amount
1			Supply and wiring points according to IS 732-1989 using rigid PVC conduit of minimum size 20 mm with specials conforming to IS 9537 part III 1983 and with suitable size specials conforming to IS 3419-1988, fixing the conduit using metal saddles spacing not exceeding 50 cm or concealed suitably and with 1.00 sq mm FR PVC insulated stranded single core copper conductor cable 650V grade, including providing switch board main and continuous earthing with No.14 SWG bare copper,required quantity of copper earth socket, brass bolt and nut crimping/ soldering etc complete with suitable size modular type metal switch boxes, modular type front plates (white) etc. up to and including 6A modular type SP switches and making good the surface of wall, colour washing etc. complete. All the terminations in the switch boards and DB's shall be tinned and the wires shall be drawn and fixed along the periphery of the box using suitable ties, tie mounts etc as required. (Group B/ RoHS compliant modular accessories).				

1.1	6	nos	Single control light point with 6A, 3 plate ceiling rose	E	841.00	Rs.Eight hundred & forty one only	5046.00
1.2	2	nos	Single control light point without ceiling rose	E	823.00	Rs.Eight hundred & twenty three only	1646.00
1.3	2	nos	Single control ceiling fan point with 6 A, 3 plate ceiling rose & with socket size stepped electronic regulator.	E	1498.00	Rs.One thousand four hundred & ninety eight only	2996.00
1.4	3	nos	Combined plug point with 6 A, 5 pin plug socket controlled by 6 A switch in the same switch board as that of light points.	E	483.00	Rs.Four hundred & eighty three only	1449.00
1.5	2	nos	Independent plug	E	561.00	Rs.Five hundred & sixty one only	1122.00
2			Supply, conveyance installation testing and commissioning the light fittings of following types made of CRCA with 0.5mm thickness complete with all accessories and lamps etc. directly on wall or ceiling with PVC round block neatly painted to suit the fitting and giving connection with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS and giving connections as required.				
2.1	6	nos	1x18/20 W Led box type fittings with power factor >0.90 .	E	2100.00	Rs.Two thousand & one hundred only	12600.00
2.2	3	nos	Supply conveyance installation testing and commissioning of 45 W LED Pressure die cast aluminium housing IP 66 Street light luminarie with driver and fixing the same on steel structure using suitable size MS fabricated clamps and giving connection etc as required(Havels ENDURA CITY LINER NEO / Bajaj Philips / Wipro/Philips/Crompton)	E	5479.00	Rs.Five thousand four hundred & seventy nine only	16437.00

2.3	1	nos	Supply conveyance installation testing and commissioning of 70 W LED Pressure die cast aluminium housing IP 65 Flood light luminarie with driver and fixing the same on steel structure using suitable size MS fabricated clamps and giving connections etc as required (Havels make JETA NEO 70/Bajaj /Philips / Wipro/Philips/Crompton)	E	8918.00	Rs.Eight thousand nine hundred & eighteen only	8918.00
2.4	10	nos	Supply conveyance installation testing and commissioning of 120 W 5700 K LED Down light fittings with integral driver IP 65 protection (High bay/ Medium Bay) with driver and Eye bolt ,Pressure die cast aluminium housing and fixing the same on Steel Struss using suitable size steel chain and giving connection etc as required(Havels make ENDURA BAYBRITE SAUCER/ Bajaj /Philips / Wipro/Philips/Crompton)	E	13171.00	Rs.Thirteen thousand one hundred & seven only	131710.00
3			Supply, fabrication, conveyance and fixing the following sizes of B class <i>GI pipe bent to shape / cut and welded to shape</i> and fixing the same to wall / parapet using clamps as noted along with each size, painting with 2 coats of synthetic enamel paint over a coat of zinc chromate primer, making good the damages, colour washing etc as required (for the installation of outdoor light fittings).				
3.1	6	m	32 mm dia with clamps made from 20 x 3 mm MS flat	m	299.00	Rs.Two hundred & ninety nine only	1794.00

4			Supply and providing the following types and power rated <i>lamps</i> in the existing fittings as required				
4.1	2	nos	Normal size 15 W BC / ES retrofit CFL/9 W LED	E	167.00	Rs.One hundred & sixty seven only	334.00
5	2	nos	Supply and installation of suitable size <i>MS rod type fan clamp</i> as per IS 732 as required.	E	124.00	Rs.One hundred & twenty four only	248.00
6	24	nos	Supply and installation of suitable size <i>MS belt type fan clamp</i> fabricated from MS flat (2 pieces) as per IS 732 as required.	E	182.00	Rs.One hundred & eighty two only	4368.00
7	60	m	Supply and providing every additional length of down rod of suitable size heavy gauge GI / WI pipe with 16/0.20mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire conforming in relevant ISS or with original wiring extended including painting as required.	m	115.00	Rs. Onehundred & fifteen only	6900.00
8			Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required.				
8.1	24	nos	1400 mm sweep (Category B)	E	1814.00	Rs.One thousand eight hundred & fourteen only	43536.00
8.2	2	nos	1200 mm sweep - 5 star rated	E	1853.00	Rs.One thousand eight hundred & fifty three only	3706.00

9			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 of wall/ceiling/ steel tubular struss</i> including making good the damages etc as required.				
9.1	575	m	20 mm dia light gauge	m	83.00	Rs.Eighty three only	47725.00
9.2	10	m	25 mm dia light gauge	m	95.00	Rs.Ninety five only	950.00
10			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.				
10.1	5	m	20 mm dia light gauge	m	120.00	Rs.One hundred & twenty only	600.00
10.2	5	m	25 mm dia light gauge	m	133.00	Rs.One hundred & thirty three only	665.00
10.3	5	m	32 mm dia light gauge	m	119.00	Rs.One hundred & nineteen only	595.00
11			Supplying and clamping the following sizes of corrugated PVC flexible conduit with necessary compression gland with locking ring and check nut at termination pointed using suitable size GI / painted MS saddles spacing not exceeding 60 cms on surface including making good the damages, colour washing etc. as required.				
11.1	30	m	20 mm dia	m	52.00	Rs.Fifty two only	1560.00
12			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.				
12.1	85	m	1.50 sq mm 1 run	m	45.00	Rs.Forty five only	3825.00

12.2	120	m	1.50 sq mm 3 run	m	77.00	Rs.Seventy seven only	9240.00
12.3	30	m	1.50 sq mm 4 run	m	94.00	Rs.Ninety four only	2820.00
12.4	40	m	1.50 sq mm 5 run	m	110.00	Rs.One hundred & ten only	4400.00
12.5	140	m	1.50 sq mm 6 run	m	126.00	Rs.One hundred & twenty six only	17640.00
12.6	250	m	1.50 sq mm 7 run	m	142.00	Rs.One hundred & forty two only	35500.00
12.7	80	m	2.50 sq mm 2 run	m	81.00	Rs.Eighty one only	6480.00
12.8	15	m	2.50 sq mm 4 run	m	134.00	Rs.One hundred & thirty four only	2010.00
13			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 (Group B/ RoHS compliant)				
13.1	3	nos	8 module metal box in recess	E	232.00	Rs.Two hundred & thirty two only	696.00
13.2	3	nos	6 module metal box in recess	E	198.00	Rs.One hundred & ninety eight only	594.00
13.4	6	nos	3 module metal box in recess	E	180.00	Rs.One hundred & eighty only	1080.00
13.5	1	no	4 module metal box in recess	E	180.00	Rs.One hundred & eighty only	180.00
13.6	1	no	12 module metal box in recess	E	354.00	rs.Three hundred & fifty four only	354.00
13.7	3	nos	24 module metal box in recess	E	430.00	Rs.Four hundred & thirty only	1290.00
14			Supply & Fixing the following types/ sizes of front plates on the existing modular boxes. (Group B/ RoHS compliant)				
14.1	6	nos	3 module white/ off-white	E	116.00	Rs.One hundred & sixteen only	696.00
14.2	3	nos	6 module white/ off-white	E	152.00	Rs.One hundred & fifty two only	456.00
14.3	3	nos	8 module white/ off-white	E	187.00	Rs.One hundred & eighty seven only	561.00
14.4	1	no	12 module white/ off-white	E	251.00	Rs.Two hundred & fifty one only	251.00
14.5	3	nos	24 module (3x8) white/Off white	E	586.00	Rs.Five hundred & eighty six only	1758.00
15.5	1	no	4 module white/ off-white	E	119.00	Rs.One hundred & nineteen only	119.00
15			Supply and Fixing the following modular switches & accessories in the existing front plates and giving necessary connections as required (Group B RoHS compliant)				
15.1	44	nos	6 A SP 1 way switch	E	119.00	Rs.One hundred & nineteen only	5236.00

15.2	6	nos	16 A SP 1 way switch	E	161.00	Rs.One hundred & sixty one only	966.00
15.3	9	nos	6A 3 pin shuttered socket	E	157.00	Rs.One hundred & fifty seven only	1413.00
15.4	6	nos	6/16 A socket	E	223.00	Rs.Two hundred & twenty three only	1338.00
15.5	24	nos	100 W Step type fan regulator - 2 M	E	522.00	Rs.Five hundred & twenty two only	12528.00
16			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				
16.1	1	no	12 way single phase double cover (IP 42/43)	E	1899.00	Rs.One thousand eight hundred & ninety nine only	1899.00
16.2	1	no	6 way (8+18) - three phase double cover (IP 42/43)	E	4039.00	Rs.Four thousand & thirty nine only	4039.00
17	1	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	Rs.Eight thousand nine hundred & sixty only	8960.00
18			Supply and installation of the following accessories 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				
18.1	1	no	40 A double pole mini break isolator	E	356.00	Rs.Three hundred & fifty six only	356.00
18.2	1	no	63 A four pole mini break isolator	E	752.00	Rs.Seven hundred & fifty two only	752.00

18.3	1	no	40 A, 2 pole, 30 mA RCCB	E	2357.00	Rs.Two thousand three hundred & fifty seven only	2357.00
18.4	1	no	40 A four pole mini break isolator	E	716.00	Rs.Seven hundred & sixteen only	716.00
18.5	1	no	40 A, 4 pole, 100 mA RCCB	E	2881.00	Rs.Two thousand eight hundred & eighty one only	2881.00
18.6	20	nos	6-32A(C curve)	E	219.00	Rs.Two hundred & nineteen only	4380.00
18.7	1	no	40 A, 10 kA, TP MCB (C curve)	E	1369.00	Rs.One thousand three hundred & sixty nine only	1369.00
18.8	1	no	50 A and 63 A, 10 kA, TP MCB (C curve)	E	1369.00	Rs.One thousand three hundred & sixty nine only	1369.00
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.				
19.1	28	m	2 core 6 sq mm with factory made clamp	m	157.00	Rs.One hundred & fifty seven only	4396.00
19.2	28	m	4 core 16 sq mm with factory made clamp	m	231.00	Rs.Two hundred & thirty one only	6468.00
19.3	5	m	4 core 35 sq mm with factory made clamp	m	351.00	Rs.Three hundred & fifty one only	1755.00
20			Supplying siemens / tropodur type nickel plated Double compression brass cable gland 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.				
20.1	2	nos	6 sq mm	E	252.00	Rs.Two hundred & fifty two only	504.00
20.2	2	nos	16 sq mm	E	319.00	Rs.Three hundred & nineteen only	638.00
20.3	2	nos	35 sq mm	E	469.00	Rs.Four hundred & sixty nine only	938.00

21			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.				
21.1	6	nos	25 sq - 95sq mm with 20 mm wide x 1.20 mm thick clip	E	27.00	Rs.Twenty seven only	162.00
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.				
22.1	4	nos	6 sq mm	E	12.60	Rs.Twelve & ps. Sixty only	50.40
22.2	8	nos	16 sq mm	E	13.70	Rs.Thirteen &Ps. seventy one only	109.60
22.3	8	nos	35 sq mm	E	16.00	Rs.Sixteen only	128.00
23	1	no	Supply and providing plate earthing as per IS 3043 with 600x600x6.30 mm GI/CI earth plate, 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 ordinary soil)	E	3917.00	Rs.Three thousand nine hundred & seventeen only	3917.00

24			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				
24.1	1	no	300 x 300 x 6 mm cast iron gully trap with covering	E	267.00	Rs.Two hundred & sixty seven only	267.00
25			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.				0.00
25.1	0.3	m	2 x 25 x 3 mm tinned copper strip	m	598.00	Rs.Five hundred & ninety eight only	179.40
26			Supply and drawing bare <i>earthing conductors</i> of the following sizes <i>along with wiring/ cables</i> and giving connection as required.				
26.1	90	m	2.65 mm copper conductor (12 SWG)	m	43.00	Rs.Forty three only	3870.00
26.2	10	m	4.00 mm copper conductor (8 SWG)	m	97.00	Rs.Ninety seven only	970.00
27			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> .				
27.1	10	m	4.00 mm copper conductor (8 SWG)	m	107.00	Rs.One hundred & seven only	1070.00
28			supply of superior quality <i>copper earth socket</i> for the following sizes of earth conductor including crimping etc. as required.				
28.1	8	nos	2.65 mm (12 SWG)	E	19.00	Rs.Nineteen only	152.00
28.2	6	nos	4.00 mm (8 SWG)	E	23.00	Rs.Twenty three only	138.00

29			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				
29.1	10	nos	25 x 3mm brass bolt & nut	E	17.00	Rs.seventeen only	170.00
30			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.				
30.1	5	m	15 mm dia	m	90.00	Rs.Ninety only	450.00
31	10	kg	Supplying and installation of <i>supports</i> , anchor bolts etc made out of suitable size <i>single section MS angle, flats etc</i> as required including painting with 2 coats of synthetic enamel paint	Kg	76.00	Rs.Seventy six only	760.00
32	3	nos	Supply and providing <i>5 Kg. Dry Chemical Powder type Fire Extinguisher</i> with hose and clamps including fixing it to wall as required.	E	2324.00	Rs.Two thousand three hundred & twenty four only	6972.00
33	1	no	Supply and providing <i>9 Litre capacity GI Fire Bucket</i> painted in post office red with primer coat of red oxide and written with white paint 'FIRE' mounted on MS angle frame work/ wall bracket filled with fine sand, painting the bracket/ floor stand including making good the damages, colour washing etc. as required.	E	156.00	Rs.One hundred & fifty six only	156.00

34			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.				
34.1	4	m	4.00 mm bare copper conductor (8 SWG)	m	85.00	Rs.Eighty five only	340.00
			Total				469974.40

PAC Rs 4,69,974 /- (Rs. Four Lakh Sixty Nine Thousand Nine Hundred and Seventy Four only)

1. I/We agreed to execute the work.
2.% below the estimate rate.
2.% above the estimate rate.
3. At the estimate rate.

CONTRACTOR

sd/-
UNIVERSITY ENGINEER