UNIVERSITY OF KERALA

ENGINEERING UNIT, KARIAVATTOM

TENDER SCHEDULE FOR ELECTRICAL WORKS IN THE SEMI-PERMANENT BUILDING OVER THE DEPARTMENT OF ARABIC AT KARIAVATTOM CAMPUS

SI No	Qty	Unit	Description of Item	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 <i>providing switch board main and continuous earthing with No.14 SWG bare copper</i> , required quantity of copper earth socket, brass bolt and nut crimping/ soldering etc complete with suitable size modular type metal switch boxes, <i>modular type front plates (white)</i> 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. (<i>Group B/ RoHS compliant modular accessories</i>).				
a	18	Nos	Single control light point with 6A, 3 plate ceiling rose (Medium Point)	Each	966.00	Rupees Nine hundred and Sixty six only	17,388.00
b	19	Nos	Single control light point with 6A, 3 plate ceiling rose (Long Point)	Each	1149.00	Rupees One thousand One hundred and Forty nine only	21,831.00
c	10	Nos	Single control light point without ceiling rose (Long point)	Each	1130.00	Rupees One thousand One hundred and thirty only	11,300.00
d	5	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.	Each	483.00	Rupees Four hundred and Eighty three only	2,415.00
e	1	Nos	Call bell point with piano type 6 A bell push at one end and 6 A, 3 plate ceiling rose at other end	Each	875.00	Rupees Eight hundred and Seventy five only	875.00

2	5	Nos	Supply conveyance installation testing and commissioning of Mounting rail fittings (box type flourescent fittings) made out of CRCA sheet of minimum thickness 0.50 mm, powder coated / stove enameled 1 x 36/ 40 W FTL with light duty electronic ballast having THD < 33%, lamp holder, lamp etc etc duly wired up for use on 240 V single phase AC supply on wall/ceiling with PVC round block neatly painted to suit the fittings and givving connections with required length of 16/0.20mm 3 core round copper conductor flex wire etc as required.	Each	945.00	Rupees Nine hundred and Forty five only	4,725.00
3	14	Nos	Supply conveyance installation testing and commissioning of Mounting rail fittings (box type fittings) made out of CRCA sheet of minimum thickness 0.50 mm, powder coated / stove enameled 1 x 36/40 W FTL with light duty electronic ballast having THD < 33%, lamp holder etc duly wired up for use on 240 V single phase AC supply directly on wall using 2 nos flat iron bracket made from 25x6mm flat iron painting the clamps and givving connections with required length of 16/0.20mm 3 core round copper conductor flex wire etc as required.	Each	1036.00	Rupees One thousand and thirty six only	14,504.00
4	10	Nos	Supply and fixing angle / straight brass lined skirt type, <i>bakelite batten holder</i> without shade and giving connection etc as required	Each	63.00	Rupees Sixty three only	630.00
5			Supply and providing the following types and power rated <i>lamps</i> in the existing fittings as required				
a	10	Nos	Normal size 15 W BC / ES retrofit CFL	Each	167.00	Rupees One hundred and Sixty seven only	1,670.00
6			SupplyConveyance, installation, testing and commissioning wall mounting fan of all sizes using mounting brackets supplied along with the fan and giving connection with existing wire.				
a	14	Nos	400 mm sweep	Each	1746.00	Rupees One thousand Seven hundred and Forty six only	24,444.00

7			Supply, conveyance, installation, testing and commissioning of the following sizes of exhaust fans in the existing opening, fixing necessary bolt and nuts, making good the damages etc. as required including giving connections with required length of 24/0.20mm PVC insulated and PVC sheathed 3 core round				
a	4	Nos	copper conductor flex wire conforming to relevant ISS. 300/ 305 mm, single phase light duty exhaust fan in metal frame	Each	1828.00	Rupees One thousand Eight	7,312.00
8			Supply and fixing the following types of superior quality 250V A.C <i>call bell</i> on existing M.S. box and giving connections with required length of 3 core, 16 / 0.20mm 650/1100V grade PVC insulated and PVC sheathed round copper conductor flex wire conforming to relevant ISS or with the extended original wiring, earthing the MS box and making good the surface as required.			hundred and Twenty eight only	
a	1	No	Ding Dong bell	Each	181.00	Rupees One hundred and Eighty one only	181.00
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</i> including making good the damages etc as required.				
a	170	m	20 mm dia light gauge	m	83.00	Rupees Eighty three only	14,110.00
b	10	m	25 mm dia light gauge	m	95.00	Rupees Ninety five only	950.00
10			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.				
a	140	m	1.50 sq mm 1 run	m	45.00	Rupees Forty five only	6,300.00
b	20	m	1.50 sq mm 2 run	m	61.00	Rupees Sixty one only	1,220.00
С	160	m	2.50 sq mm 2 run	m	81.00	Rupees Eighty one only	12,960.00
11			Supplying & Drawing the following types of <i>UTP Cable</i> conforming to relevant standards through the existing conduit and giving connections as required				
a	50	m	Cat 6 UTP Cable	m	52.00	Rupees Fifty two only	2,600.00

12			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>)				
a	2	Nos	1 module metal box in recess	Each	165.00	Rupees One hundred and Sixty five only	330.00
b	3	Nos	3 module metal box in recess		180.00	Rupees One hundred and Eighty only	540.00
С	2	Nos	8 module metal box in recess	Each	232.00	Rupees Two hundred and Thirty two only	464.00
d	5	Nos	10 module metal box in recess	Each	330.00	Rupees Three hundred and thirty only	1,650.00
13			Supply & Fixing the following types/ sizes of front plates on the existing modular boxes. (<i>Group B/RoHS compliant</i>)				
			S & F front plates				
a	2	Nos	1 module white/ off-white	Each	101.00	Rupees One hundred and one only	202.00
b	3	Nos	3 module white/ off-white	Each	116.00	Rupees One hundred and Sixteen only	348.00
c	2	Nos	8 module white/ off-white	Each	187.00	Rupees One hundred and Eighty seven only	374.00
d	5	Nos	10 module white/ off-white	Each	216.00	Rupees Two hundred and Sixteen only	1,080.00
14			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>)				
a	14	Nos	6 A SP 1 way switch	Each	119.00	Rupees One hundred and Nineteen only	1,666.00
b	8	Nos	16 A SP 1 way switch	Each	161.00	Rupees One hundred and Sixty one only	1,288.00
c	8	Nos	6/16 A socket	Each	223.00	Rupees Two hundred and twenty three only	1,784.00
d	16	Nos	6A 3 pin shuttered socket	Each	157.00	Rupees One hundred and Fifty seven only	2,512.00

e	2	Nos	RJ45	Each	119.00	Rupees One hundred and Nineteen only	238.00
15			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				
a	1	No	6 way (8+18) - three phase double cover (IP 42/43)	Each	4039.00	Rupees Four thousand and Thirty nine only	4,039.00
16			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	1	No	40 A four pole mini break isolator	Each	716.00	Rupees Seven hundred and Sixteen only	716.00
b	1	No	40 A, 4 pole, 30 mA RCCB	Each	2780.00	Rupees Two thousand Seven hundred and Eighty only	2,780.00
с	15	Nos	6-32A(C curve)	Each	219.00	Rupees Two hundred and nineteen only	3,285.00
d	1	No	40 A, 10 kA, TP MCB (C curve)	Each	1369.00	Rupees One thousand Three hundred and Sixty nine only	1,369.00
17			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	30	m	4 core 16 sq mm with factory made clamp	m	231.00	Rupees Two hundred and thirty one only	6,930.00
18			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	2	Nos	16 sq mm	Each	319.00	Rupees Three hundred and nineteen only	638.00
19			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	4sqmm-16 sq mm with 12 mm wide x 1 mm thick clip	Each	18.00	Rupees Eighteen only	72.00
20			Supply of superior quality <i>aluminium tubular cable socke t</i> and making core termination of cables of the following sizes including crimping etc. as required.				
a	8	Nos	16 sq mm	Each	13.70	Rupees Thirteen and Paise Seventy only	109.60
21			Supply and drawing bare <i>earthing conductor s</i> of the following sizes <i>along with wiring/ cables</i> and giving connection as required.				
a	60	m	3.15 mm copper conductor (10 SWG)	m	62.00	Rupees Sixty two only	3,720.00
22			supply of superior quality <i>copper earth socket</i> for the following sizes of earth conductor including crimping etc. as required.				
a	4	Nos	3.15 mm (10 SWG)	Each	19.00	Rupees Nineteen only	76.00
23			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	6	Nos	25 x 3mm brass bolt & nut	Each	17.00	Rupees Seventeen only	102.00
						TOTAL I	1,81,727.60

PAC Rs.1,81,728/- (Rupees One Lakh Eighty one thousand Seven hundred and Twenty eight only)

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

UNIVERSITY ENGINEER CONTRACTOR