

UNIVERSITY OF KERALA						
ENGINEERING UNIT, KARIAVATTOM						
Tender schedule for the Electrical works in the Dept.of Chemistry at Kariavattom campus utilizing RUSA funds.						
Sl. No	Qty	Specification	Unit	Rate	Rate in words	Amount
		PART-I				
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>).				
1.1	3 Nos.	Single control light point with 6A, 3 plate ceiling rose	E	841.00	Rs.Eight hundred & forty one only	2,523.00
1.2	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	421.00	Rs.Four hundred & twenty one only	1,263.00

2			<i>Supply</i> , 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 <i>round block</i> 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.				0.00
2.1	2	Nos.	1x28w T5 fitting with APF electronic ballast suitable for continuous operation with THD <10%, power factor >0.98, RoHS compliant,high lumen tube .	E	1717.00	Rs.One thousand seven hundred & seventeen only	3,434.00
3			<i>Supply</i> , conveyance, installation, testing and commissioning the light fittings of following types made of .5mm thick CRCA sheet accessories and lamps etc. including supplying and fixing <i>ball and socket arrangements</i> on PVC round block, <i>suspension down rod of 19mm dia MS conduit up to 2x30cm</i> length including painting and wiring the down rod with 16/0.20mm 3 core round copper conductor flex wire conforming to relevant ISS or extending the original wiring and giving connections etc. a required.				
3.1	6	nos	1x28wT5 fitting with APF electronic ballast suitable for continuous operation with THD <10%, power factor >0.98, RoHS compliant,high lumen tube .	E	1915.00	Rs.One thousand nine hundred & fifteen only	11,490.00
4	2	m	Supplying and providing <i>extra H.G conduit down rod of 19 mm dia 2 x 1.00 m</i> long with 16/0.20 mm 3 core copper conductor flex wire conforming to relevant ISS or with the extended original wiring and giving connection etc. as required.	m	198.00	Rs.One hundred & ninety eight only	396.00

5			<i>Supply</i> , conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories <i>excluding resistance type regulator</i> , 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.				0.00
5.1	5	Nos.	1200 mm sweep - 5 star rated	E	1853.00	Rs.One thousand eight hundred & fifty three only	9,265.00
6			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.				
6.1	200	m	20 mm dia light gauge	m	83.00	Rs.Eighty three only	16,600.00
7			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	80	m	1.50 sq mm 1 run	m	45.00	Rs.Forty five only	3,600.00
b	130	m	2.50 sq mm 1 run	m	55.00	Rs.Fifty five only	7,150.00
c	80	m	2.50 sq mm 2 run	m	81.00	Rs.Eighty one only	6,480.00
d	130	m	4.00 sq mm 2 run	m	106.00	Rs.One hundred & six only	13,780.00
8			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.				
a	9	m	100 x 50 mm CMS with base & lid	M	935.00	Rs.Nine hundred & thirty five only	8,415.00
b	2	Nos.	End Cap	E	92.00	Rs.Ninety two only	184.00

c	8	Nos.	8 module mounting box	E	251.00	Rs.Two hundred & fifty one only	2,008.00
9			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	14	Nos.	2 module metal box in recess	E	165.00	Rs.One hundred & sixty five only	2,310.00
b	8	Nos.	6 module metal box in recess	E	198.00	Rs.One hundred & ninety eight only	1,584.00
c	6	Nos.	8 module metal box in recess	E	232.00	Rs.Two hundred & thirty two only	1,392.00
d	3	Nos.	12 module metal box in recess	E	354.00	Rs.Three hundred & fifty four only	1,062.00
10			Supply & Fixing the following types/ sizes of front plates on the existing modular boxes. <i>(Group B/ RoHS compliant)</i>				
a	14	Nos.	2 module white/ off-white	E	101.00	Rs.One hundred & one only	1,414.00
b	8	Nos.	6 module white/ off-white	E	152.00	Rs.One hundred & fifty two only	1,216.00
c	14	Nos.	8 module white/ off-white	E	187.00	Rs.One hundred & eighty seven only	2,618.00
d	3	Nos.	12 module white/ off-white	E	251.00	Rs.Two hundred & fifty one only	753.00
11			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	55	Nos.	6 A SP 1 way switch	E	119.00	Rs.One hundred & nineteen only	6,545.00
b	7	Nos.	32 A DP switch with indicator	E	316.00	Rs.Three hundred & Sixteen only	2,212.00
c	7	Nos.	25A socket		223.00	Rs.Two hundred & twenty three only	1,561.00
d	46	Nos.	6A 3 pin shuttered socket	E	157.00	Rs.One hundred & fifty seven only	7,222.00

e	5	Nos.	100 W Step type fan regulator - 2 M	E	522.00	Rs.Five hundred & twenty two only	2,610.00
f	20	Nos.	16 A SP 1 way switch	E	161.00	Rs.One hundred & sixty one only	3,220.00
g	20	Nos.	6/16 A socket	E	223.00	Rs.Two hundred & twenty three only	4,460.00
h	5	Nos.	Blank plate 1 M	E	19.00	Rs.Nineteen only	95.00
12			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	2	Nos.	DP enclosure for independent mounting of MCB	E	486.00	Rs.Four hundred & eighty six only	972.00
b	1	Nos.	8 way single phase double cover (IP 42/43)	E	1572.00	Rs.One thousand five hundred & seventy two only	1,572.00
c	1	Nos.	12 way single phase double cover (IP 42/43)	E	1899.00	Rs.One thousand eight hundred & ninety nine only	1,899.00
d	2	Nos.	4 way (8+12) - three phase double cover (IP 42/43)	E	3329.00	Rs.Three thousand three hundred & twenty nine only	6,658.00
13			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	Nos.	40 A four pole mini break isolator	E	716.00	Rs.Seven hundred & sixteen only	1,432.00
b	2	Nos.	40 A, 4 pole, 100 mA RCCB	E	2881.00	Rs.Two thousand eight hundred & eighty one only	5,762.00
c	4	Nos.	40 A double pole mini break isolator	E	356.00	Rs.Three hundred & fifty six only	1,424.00
d	2	Nos.	40 A, 2 pole, 30 mA RCCB	E	2357.00	Rs.Two thousand three hundred & fifty seven only	4,714.00

e	36	Nos.	6-32A(C curve)	E	219.00	Rs.Two hundred & nineteen only	7,884.00
14	2	Nos.	Dismantling the existing 1200mm sweep ceiling fan, scrapping, cleaning, overhauling, greasing the bearing, reassembling and painting the same using suitable colour enamel paint, refitting the same in position and giving connection etc. as required.	E	163.00	Rs.One hundred & sixty three only	326.00
15	6	Nos.	Dismantling the existing single / double tube fluorescent fitting complete, cleaning and painting with two coats of synthetic enamel paint, checking all connections and refitting the same in position and giving connections etc. as required.	E	95.00	Rs.Ninety five only	570.00
16			Laying and clamping of 1 no. PVC insulated and PVC sheathed armoured 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	15	m	3.5 core cable of size exceeding 25 sq mm but not exceeding 50 sq mm with company fabricated saddles	m	61.60	Rs.Sixty one & ps. Sixty only	924.00
17			Supply and drawing bare <i>earthing conductors</i> of the following sizes <i>along with wiring/ cables</i> and giving connection as required.				
a	30	m	3.15 mm copper conductor (10 SWG)	m	62.00	Rs.Sixty two only	1,860.00
b	40	m	2.65 mm copper conductor (12 SWG)	m	43.00	Rs.Forty three only	1,720.00
c	0.6	m	25 x 3 mm copper strip tinned at the points of contacts	m	482.00	Rs.Four hundred & eighty two only	289.20

18	2	Nos.	Dismantling the existing exhaust fan, scrapping, cleaning, overhauling, greasing the bearing, reassembling and painting the same using suitable colour enamel paint, refitting the same in position and giving connection etc. as required.	E	144.00	Rs.One hundred & forty four only	288.00
19	2	Nos.	Dismantling the existing 3 phase 4/6way DB and refilling the holes on wall using brick work and cement mortor and plastering colour washing etc as required	E	640.00	Rs.Six hundred & forty only	1,280.00
			TOTAL				166,436.20

PAC Rs.1,66,436/- (Rupees One Lakh sixty Six Thousand Four Hundred And Thirty Six Only)

I/We agreed to execute the work. 1.% below the estimate rate.

2. % above the estimate rate. 3. At the estimate rate.

CONTRACTOR

Sd/-
UNIVERSITY ENGINEER