

UNIVERSITY OF KERALA

ENGINEERING UNIT KARIAVATTOM

ELECTRIFICATION OF NEWLY CONSTRUCTED TOILET BLOCK FOR PLATINUM JUBILEE MULTI PURPOSE INDOOR COURT AT SH CAMPUS, PALAYAM

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 <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	16 nos	Single control light point with 6A, 3 plate ceiling rose	E	841.00	Rs.Eight hundred & forty one only	13456.00
b	6 nos	Single control light point without ceiling rose	E	823.00	Rs.Eight hundred & twenty three only	4938.00

c	3	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	4494.00
d	4	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	1684.00
e	4	nos	Independent plug	E	561.00	Rs.Five hundred & sixty one only	2244.00
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.				
a	4	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 t only	6868.00
3	8	nos	Supply and installation of surface mounded 15 W LED, 5700K light fittings on ceiling using suitable sizes steel screws, cupwashers and giving connections etc as required (Havels make integra surface/ similar make of Bajaj/ Crompton/ Philips/Wipro)	E	1788.00	Rs.One thousand seven hundred & eighty eight only	14304.00
4	4	Nos	Supply and fitting energy saving 10W LED IP65 Bulk head Luminary with opal diffuser on wall and giving connections with existing flexwire as required	E	1398.00	Rs.One thousand three hundred & ninety eight only	5592.00
5	2	Nos	Supply and fixing 1x8 W T5 Mirror light on wall and giving connections etc as required	E	613.00	Rs.Six hundred & thirteen only	1226.00

6	2	nos	Supply and fixing angle / straight brass lined skirt type, <i>bakelite batten holder</i> without shade and giving connection etc as required	E	63.00	Rs.Sixty three only	126.00
7			Supply and providing the following types and power rated <i>lamps</i> in the existing fittings as required				
a	2	nos	Spiral 15 W BC / ES retrofit CFL	E	260.00	Rs.Two hundred & sixty only	520.00
8	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
9			<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.				
a	3	nos	1200 mm sweep - 5 star rated	E	1853.00	Rs.One thousand eight hundred & fifty three only	5559.00
10	2	nos	<i>Charges for cutting holes</i> suitable for accommodating <i>exhaust fans</i> of sizes <i>up to 305 mm sweep</i> including plastering, colour washing etc. as required.	E	294.00	Rs.Two hundred & ninety four only	588.00
11			<i>Supply, conveyance, installation, testing and commissioning</i> of the following sizes of <i>exhaust fans</i> 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 copper conductor flex wire conforming to relevant ISS.				
a	2	nos	305 mm, single phase, heavy duty, 1400 rpm exhaust fan in metal frame	E	2629.00	Rs.Two thousand six hundred & twenty nine only	5258.00

12			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.				
a	50	m	20 mm dia light gauge	m	120.00	Rs.One hundred & twenty only	6000.00
13			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	25	m	1.50 sq mm 1 run	m	45.00	Rs.Forty five only	1125.00
b	20	m	2.50 sq mm 1 run	m	55.00	Rs.Fifty five only	1100.00
c	25	m	2.50 sq mm 2 run	m	81.00	Rs.Eighty one only	2025.00
d	20	m	4.00 sq mm 2 run	m	106.00	Rs.One hundred & six only	2120.00
14			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		6 module metal box in recess	E	198.00	Rs.One hundred & ninety eight only	396.00
15			Supply & Fixing the following types/ sizes of front plates on the existing modular boxes. (<i>Group B/ RoHS compliant</i>)				
a	2		6 module white/ off-white	E	152.00	Rs.One hundred & fifty two only	304.00
16			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	2	nos	16 A SP 1 way switch	E	161.00	Rs.One hundred & sixty one only	322.00
b	2	nos	6/16 A socket	E	223.00	Rs.Two hundred & twenty three only	446.00

c	2		6 A SP 1 way switch	E	119.00	Rs.One hundred & nineteen only	238.00
d	2		6A 3 pin shuttered socket	E	157.00	Rs.One hundred & fifty seven only	314.00
17			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	nos	12 way single phase double cover (IP 42/43)	E	1899.00	Rs.One thousand eight hundred & ninety nine only	1899.00
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	1	no	40 A double pole mini break isolator	E	356.00	Rs.Three hundred & fifty six only	356.00
b	1	no	40 A, 2 pole, 30 mA RCCB	E	2357.00	Rs.Two thousand three hundred & fifty seven only	2357.00
c	8	nos	6-32A(C curve)	E	219.00	Rs.Two hundred & nineteen only	1752.00
19	35	m	Supply and providing 2x 4sqmm weather proof aluminium wire clipped with 12SWG GI guy wire for service connection	M	28.00	Rs.Twenty eight only	980.00
			TOTAL				88839.00

PAC Rs.88,839/- (Rs.Eighty eight thousand eight hundred & thirty nine only)

I/We agree to execute the work.

1.% below the estimate rate

2.% above the estimate rate.

3. At the estimate.

CONTRACTOR

sd/-
UNIVERSITY ENGINEER