### UNIVERSITY OF KERALA

### SUBDIVISION I KARIAVATTOM

# TENDER SHEDULE FOR THE CONTRUCTION OF COMMON TOILETS AND WATER KIOSKS AT KARIYAVATTOM CAMPUS - ELECTRIFICATION WORKS

Sl. No	Item Description	Qty	Unit	Rate / Unit	Rate in Words	Amount					
	1. ELECTRIFICATION										
1)	Supply and wiring points according to IS: 732-1989 using ISI marked rigid PVC conduit of minimum size 20 mm conforming to IS: 9537 Part-3 1983 and with suitable size specials conforming to IS: 3419-1988, fixing the conduit using metal saddles spacing not exceeding 50 cms or concealed suitably and with ISI marked 1.50 sq. mm PVC insulated stranded single core FRLS copper conductor cable of 650 / 1100 V grade, including providing switch board main and continuous earthing with ISI marked 1.50 sq. mm PVC insulated stranded single core FRLS copper conductor cable 650 / 1100 V grade, 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. (RoHS compliant modular accessories) br>Single control light point with 6A, 3-plate ceiling rose - Short point.	42	Point	1049.25	One Thousand and Forty Nine Rupees Twenty Five Paisa only	44068.50					

		SH	EDULE			
2)	od248951/2020_2021 Supply and wiring points according to IS: 732-1989 using ISI marked rigid PVC conduit of minimum size 20 mm conforming to IS: 9537 Part-3 1983 and with suitable size specials conforming to IS: 3419-1988, fixing the conduit using metal saddles spacing not exceeding 50 cms or concealed suitably and with ISI marked 1.50 sq. mm PVC insulated stranded single core FRLS copper conductor cable of 650 / 1100 V grade, including providing switch board main and continuous earthing with ISI marked 1.50 sq. mm PVC insulated stranded single core FRLS copper conductor cable 650 / 1100 V grade, 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. (RoHS compliant modular accessories) br>Single control light point without ceiling rose - Short point	15	Point	1030.27	One Thousand Thirty Rupees Twenty Seven Rupees	15454.05

		SH	EDULE			
3)	supply and wiring points according to IS: 732-1989 using ISI marked rigid PVC conduit of minimum size 20 mm conforming to IS: 9537 Part-3 1983 and with suitable size specials conforming to IS: 3419-1988, fixing the conduit using metal saddles spacing not exceeding 50 cms or concealed suitably and with ISI marked 1.50 sq. mm PVC insulated stranded single core FRLS copper conductor cable of 650 / 1100 V grade, including providing switch board main and continuous earthing with ISI marked 1.50 sq. mm PVC insulated stranded single core FRLS copper conductor cable 650 / 1100 V grade, 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 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. (RoHS compliant modular accessories) < br/>br Combined plug point with 6A, 5-pin plug socket controlled by 6A switch in the same switch board as that of light points - Short point.	3	E	466.43	Four Hundred and Sixty Six Rupees Fourty Three Paisa only	1399.29
4)	od255210/2020_2021 Supply and fixing water proof GPP box of size 380 x 320 x 210 mm having hinged door, provision for cable entry and exit, necessary supports for fixing fuse units, neutral etc and fixing the same in the existing RCC pole using 25 x 6 mm Aluminium strips including cutting, bending to shape, drilling necessary holes etc and giving connections as required.	3	No	2193.18	Two Thousand One Hundred and Ninety Three Rupees Eighteen Paisa only	6579.54
	2.WIRIN	NG DEVICE	ES AND I	IGHTING FIX	TURES	

1)	1.50.1 Installation of exhaust fan in the existing opening, including making good the damage connection testing, commissioning etc. as required.Upto 450 mm sweep	12	E	431.18	Four Hundred and Thirty One Rupees Eighteen Paisa only	5174.16

		SH	EDULE			
2)	1.56 Supplying and fixing suitable size Gl box with modular plate and cover in front on surface or in recess, including providing and fixing 2 Nos. 3 pin 5/6 A modular socket outlets and 2 Nos. 5/6 A modular switches, connection etc. as required. (For light plugs to be used in non residential buildings).	3	E	692.86	Six Hundred and Ninety Two Rupees Eighty Six Paisa only	2078.58
3)	1.57 Supplying & fixing suitable size Gl box wih modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	6	E	760.66	Seven Hundred and Sixty Rupees Sixty Six Paisa only	4563.96
4)	1.27.2 Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.3 Module (100mmX75mm	3	E	317.28	Three Hundred and Seventeen Rupees Twenty Eight Paisa only	951.84
5)	1.27.4 Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.6 Module (200mmX75mm)	3	E	395.92	Three Hundred and Ninety Five Rupees Ninety Two Paisa only	1187.76
6)	1.24.5 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.6 pin 15/16 amp socket outlet	9	E	207.45	Two Hundred and Seven Rupees Fourty Five Paisa only	1867.05

		SH	EDULE			
7)	1.24.3 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.15/16 amp switch	9	E	155.93	One Hundred and Fifty Five Rupees Ninety Three Paisa only	1403.37
8)	1.58 Supplying and fixing PVC batten/ angle holder including connection etc. as required.	18	Е	107.12	One Hundred and Seven Rupees Twelve Paisa only	1928.16
9)	Supply, fabrication, conveyance and fixing the following sizes of B class GI pipe bent to shape / cut and welded to shape 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.32 mm dia with HG company fabricated clamps	15.6	М	586.16	Five Hundred and Eighty Six Rupees Sixteen Paisa only	9144.10
10)	90.3.20.3 Supply & installation of light fittings on TW round block block 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.1200 mm 1X20W LED Lamp with box type Fixture	18	E	1254.23	One Thousand Two Hundred and Fifty Four Rupees Twenty Three Paisa only	22576.14

		SH	EDULE			
11)	90.4.1 Supply and installation of suitable size MS rod type fan clamp in the RCC slab as per IS 732 as required	3	E	175.29	One Hundred and Seventy Five Rupees Twenty Nine Paisa only	525.87
12)	90.4.8 Charges for cutting holes suitable for accommodating exhaust fans up to 305mm sweep including plastering colour washing etc. as required.	12	E	475.96	Four Hundred and Seventy Five Rupees Ninety Six Paisa only	5711.52
13)	od248955/2020_2021 Supply of BEE rated 9W LED bulb (B22 / E27) (Orient/Philips/Havels)	18	E	105.00	One Hundred and Five Rupees only	1890.00
14)	od248957/2020_2021 Supply, Conveyance, installation, testing and commissioning of 40W LED street light output greater than 100lumen/W 4000-6000 K with IP 66 protection LED Chip make Cree/Lumilled/Nichea with power factor greater than 0.95 at full load, internal surge protection up to 8 KV, and Aluminium pressure die-cast Powder coated housing, acrylic cover complete with THD less than 10%, power factor greater than 0.98, RoHS compliant, duly wired up for use on 230 V AC supply. Driver compartment should be seperatly accessible for maintenance. (Ref code: Havells Endura Pearl Neo/Crompton/Philips/Wipro)	8	E	4529.96	Four Thousand Five Hundred and Twenty nine Rupees Ninety Six Paisa only	36239.68

		511	EDULE			
15)	od248958/2020_2021 Supplying of 400 mm sweep oscillating type wall mounting fan having 3-speed control, oscillation control at bottom and suitable for operation on single phase 230 V, 50 Hz AC supply complete with continuous duty motor, chrome plated front and rear guards and all other accessories as required. (Make- Crompton, Havells, Orient or Almonard)	3	E	1673.00	One Thousand Six Hundred and Seventy Three Rupees only	5019.00
16)	od248959/2020_2021 Supplying and drawing following sizes of multi core FRLS PVC insulated solid aluminium conductor flat service cables in the existing surface / recessed steel/ PVC conduit as required br>6Sqmm 2 core	5	М	44.20	Fourty Four Rupees Twenty paisa only	221.00
17)	od248961/2020_2021 Supply and fixing 32A, HRC fuse base with HRC fuse link in the existing meter box including giving connections as required.	6	E	160.97	One Hundred and Sixty Rupees Ninety Seven Paisa only	965.82
18)	od248962/2020_2021 Supply and installation of 32 A, 2-Way neutral links mounted on DMC/SMC base in the existing meter board including giving connections as required.	9	E	137.32	One Hundred and Thirty Seven Rupees Thirty Two Paisa only	1235.88
19)	od248954/2020_2021 Supply of 300/305 mm sweep Light Duty Exhaust fan in metal frame working on 230 V A/C	12	Е	1472.00	One Thousand Four Hundred and Seventy Two Rupees only	17664.00
20)	90.4.6 Conveyance, installation, testing and commissioning of wall mounting fans of all types using mounting brackets supplied along with the fan.	3	E	146.71	One Hundred and Fourty Six Rupees Seventy One Paisa only	440.13

	3. DISTRIBUTION BOARDS									
1)	2.10.1 Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single pole	18	Е	237.28	Two Hundred and Thirty Seven Rupees Twenty Eight Paisa only	4271.04				
2)	2.11 Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	6	E	9.49	Nine Rupees Fourty Nine Paisa only	56.94				
3)	2.12.1 Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps	6	E	402.70	Four Hundred and Two Rupees Seventy Paisa only	2416.20				
4)	2.14.1 Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.25 amps	3	E	2291.47	Two Thousand Two Hundred and Ninety One Rupees Fourty Seven Paisa only	6874.41				
5)	2.14.2 Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps	1	Е	2490.79	Two Thousand Four Hundred and Ninety Rupees Seventy Nine Paisa only	2490.79				

		5H	EDULE						
6)	2.3.3 Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator12 way, Double door	3	E	2440.62	Two Thousand Four Hundred and Fourty Rupees Sixty Two paisa only	7321.86			
4.WIRING									
1)	90.6.10.1 Supply and fixing of following sizes of light gauge PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required20 mm	30	М	97.71	Ninety Seven Rupees Seventy One Paisa only	2931.30			
2)	90.6.10.2 Supply and fixing of following sizes of light gauge PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required25 mm	30	М	108.07	One Hundred and Eight Rupees Seven Paisa only	3242.10			
3)	90.6.10.3 Supply and fixing of following sizes of light gauge PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required32 mm	30	М	126.13	One Hundred and Twenty Six Rupees Thirteen Paisa only.	3783.90			

		SH	EDULE			
4)	90.12.7.14 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.3 core 10 sq mm with factory made clamp	80	М	231.95	Two Hundred and Thirty One Rupees Ninety Five Paisa only	18556.00
5)	90.12.5.14 Supply & laying of one number PVC insulated and PVC sheathed armoured aluminium power cable of 1.1KV grade of the following sizes in the existing RCC/HUME / STONE WARE/ GI/ DWC pipe as required.3 core 10 sq mm	47	М	212.69	Two Hundred and Twelve Rupees Sixty Nine Paisa only	9996.43
6)	90.12.10.2 Supply & laying of DWC pipe in ordinary soil 0.75m below ground level including excavation50/38 mm or nearest size	47	М	290.15	Two Hundred and Ninety Rupees Fifteen Paisa only	13637.05
7)	90.12.12.2 Supply & laying of DWC pipe in ordinary soil 1.2 m below ground level including excavation50/38 mm or nearest size	5	М	377.28	Three Hundred and Seventy Seven Rupees Twenty Eight Paisa only	1886.40
8)	9.1.7 Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.3 X 10 sq. mm (22mm)	6	SET	250.84	Two Hundred and Fifty Rupees Eighty Four Paisa only	1505.04

		511	EDULE			
9)	1.17.12 Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required.3 x 2.5 sq. Mm	17	M	89.49	Eighty Nine Rupees Fourty Nine Paisa only	1521.33
10)	1.17.15 Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required.6 x 2.5 sq. Mm	36	М	169.49	One Hundred and Sixty Nine Rupees Fourty Nine Paisa only	6101.64
11)	1.17.30 Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required.3 x 6 sq. Mm	18	M	197.96	One Hundred and Ninety Seven Rupees Ninety Six Paisa only	3563.28

## **5.EARTHING**

1)	od255217/2020_2021 Providing and laying earth connection from earth electrode with 4.00 mm dia (8 SWG) copper wire in 25 mm dia PVC pipe from earth electrode including connection with copper thimble, excavation and re-filling etc as required.	15	М	166.78	One Hundred and Sixty Six Rupees Seventy Eight Paisa only	2501.70
2)	od255218/2020_2021 Earthing with G.I. earth pipe 2.5 metre long, 40 mm dia including accessories, and providing br>masonry enclosure with cover plate having locking arrangement and watering pipe etc. with br>charcoal/ coke and salt as required	3	SET	4904.29	Four Thousand Nine Hundred and Four Rupees Twenty Nine Paisa only	14712.87

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2)	90.16.2.2 Supply and laying of the following sizes of B class GI pipe laid 0.6 m below ground level including excavating trench of suitable size and refilling etc, as required.20 mm dia. G.I pipe ( medium class)	18	M	226.44	Two Hundred and Twenty Six Rupees Fdourty Four Paisa only	4075.92
	90.16.5.4 Supply of superior quality copper earth socket for the following size of earth conductor including crimping etc. as required.4.00 mm (8 SWG)	12	E	27.98	Twenty Seven Rupees Ninety Eight Paisa only	335.76
	TOTAL:					300071.36
	GRAND TOTAL after round off:					300071.00

(Rupees Three Lakh and Seventy One only)

agree to undertake the above mentioned work:-								
1)	At the estimate rate.							
2)	At% below the estimate rate.							
3)	At% above the estimate rate.							
	Rate should be quoted both in figures and words							

CONTRACTOR ASSISTANT EXECUTIVE ENGINEER II