

**UNIVERSITY OF KERALA
ENGINEERING UNIT, KARIAVATTOM**

**TENDER SCHEDULE FOR ELECTRICATION TO THE NEWLY CONSTRUCTED BUILDING FOR ENVIORNMENTAL SCIENCE AT KARIAVATTOM
CAMPUS**

Sl.No	Qty		Specification	unit	Rate	Rate in words	Amount
1			<i>Wiring points with PVC conduit, modular box with white front plate & modular type accessories</i>				
			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	54	Nos	Single control light point with 6A, 3 plate ceiling rose	E	966.00	Rs. Nine hundred & sixty six only	52,164.00
b	24	Nos	Single control ceiling fan point with 6 A, 3 plate ceiling rose & with socket size stepped electronic regulator.	E	1,622.00	Rs.One thousand six hundred & twenty two only	38,928.00
c	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	E	1,004.00	Rs.One thousand & four only	1,004.00
d	7	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	3,381.00

e	5	Nos	Single control light point without ceiling rose	E	947.00	Rs. Nine hundred & forty seven only	4,735.00
			<i>Supply & installation of light fittings on TW round block</i>				
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	10	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	1,717.00	Rs. One thousand seven hundred & seventeen only	17,170.00
3			Supply, 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.				
a	32	Nos	1x28wT5 fitting with APF electronic ballast suitable for continuous operation with THD <10%, power factor >0.98, RoHS compliant,high lumen tube .	E	1,915.00	Rs. One thousand nine hundred & fifteen only	61,280.00
4			Supply, conveyance, installation, testing and commissioning the light fittings of following types made of CRCA sheet .5mm thick with all accessories and lamps etc. suspended from ceiling <i>using 2 nos steel chain of length not exceeding 30 cm</i> properly hooked to steel hooks anchored to the ceiling and giving connections with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS or extending the original wiring and giving connection etc. as required.				

			Recess mounting decorative fluorescent tube (cat2)light fitting complete with lamp holder, APF electronic ballast suitable for continuous operation with THD <10%, power factor >0.98, RoHS compliant,high lumen tube, duly wired up for use on 230 V AC supply.				
a	6	Nos	2x28wT5(Mirror Optics)	E	6,315.00	Rs. Six thousand three hundred & fifteen only	37,890.00
5	4	Nos	Supply and fixing <i>cast aluminium stove enameled bulk head fitting</i> with deep drawn anodised aluminium body, epoxy powder coated, heat resistant prismatic glass cover suitable for 9 W CFL to wall / ceiling including giving connections with required length of 16/0.20mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire conforming to relevant ISS or extending the original wiring and making good the surface as required.	E	601.00	Rs. Six hundred & one only	2,404.00
6			Supply and providing the following types and power rated <i>lamps</i> in the existing fittings as required				
a	9	Nos	Dwarf size 11 W BC / ES / E14 retrofit CFL	E	156.00	Rs. One hundred & fifty six only	1,404.00
7		Nos	<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	2,629.00	Rs. Two thousand six hundred & twenty nine	5,258.00
b	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 nine only	588.00
c	24	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	2,976.00

d	12	M	Supply and providing every <i>additional length of down rod</i> 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. One hundred & fifteen only	1,380.00
8			<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	24	Nos	1200 mm sweep - 5 star rated	E	1,853.00	Rs. One thousand eight hundred & fifty three only	44,472.00
9			<i>Supply</i> , conveyance, installation, testing and commissioning of pre-wired <i>light fitting</i> of the following types complete with all accessories and lamps etc. <i>in the existing GI pipe</i> and giving connections with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS or extending the original wiring and giving connection etc. as required.				
a	3	Nos	1x 16w LED street light fittings.	E	2,564.00	Rs. Two thousand five hundred & sixty four	7,692.00
10			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).				
a	4	M	25 mm dia with HG company fabricated clamps	m	274.00	Rs. Two hundred & seventy four only	959.00
			SH: ERECTION OF CALL BELL				

11			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.				
a	1	Nos	Buzzer	E	110.00	Rs. One hundred & ten only	110.00
			SH: SUB MAIN WIRING				
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>on surface</i> including making good the damages etc as required.				
a	180	M	20 mm dia light gauge	m	83.00	Rs. Eighty three only	14,940.00
b	10	M	25 mm dia light gauge	m	95.00	Rs. Ninety five only	950.00
13			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				0.00
a	100	M	20 mm dia light gauge	m	120.00	Rs. One hundred & twenty only	12,000.00
a	20	M	25 mm dia light gauge	m	133.00	Rs. One hundred & thirty three only	2,660.00
14			Supply & drawing copper wires				
			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	750	M	1.50 sq mm 1 run	m	45.00	Rs. Forty five only	33,750.00
b	200	m	2.50 sq mm 1 run	m	55.00	Rs. Fifty five only	11,000.00
c	750	M	2.50 sq mm 2 run	m	81.00	Rs. Eighty one only	60,750.00
d	200	M	4.00 sq mm 2 run	m	106.00	Rs. One hundred & six only	21,200.00
e	100	M	1.50 sq mm 3 run	m	77.00	Rs. Seventy seven only	7,700.00
15			<i>Industrial plug & socket</i>				

			Supply and fixing <i>SP & N metal case enclosure</i> with 2 pole and earth plug socket with pin suitable for incorporating , SP MCB (including cost of SP MCB) in surface/ recess including giving necessary connections, making good the damages etc. as required.				
a	12	Nos	250V, 25A, 2 pole and earth	E	1,190.00	Rs. One thousand one hundred & ninety only	14,280.00
			<i>SH: S& F CABLE MANAGEMENT SYSTEM</i>				
16			Supply and fixing <i>50 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	20	M	50 x 50 mm CMS with base & lid	M	537.00	Rs. Five hundred & thirty seven only	10,740.00
b	6	Nos	External Angle 90°	E	130.00	Rs. One hundred & thirty only	780.00
c	6	Nos	Internal Angle 90°	E	127.00	Rs. One hundred & twenty seven only	762.00
d	6	Nos	Cable Retainer	E	42.00	Rs. Forty two only	252.00
17			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	130	M	100 x 50 mm CMS with base & lid	M	935.00	Rs. Nine hundred & thirty five	121,550.00
b	9	Nos	Cable divider	E	108.00	Rs. One hundred & eight only	972.00
c	5	Nos	External Angle 90°	E	139.00	Rs. One hundred & thirty nine only	695.00
d	5	Nos	Internal Angle 90°	E	127.00	Rs. One hundred & twenty seven only	635.00
e	6	No	Flat Angle 90°/TEE	E	149.00	Rs. One hundred & forty nine only	894.00

f	6	Nos	End Cap	E	92.00	Rs. Ninety two only	552.00
g	6	Nos	Joint cover	E	96.00	Rs. Ninety six only	576.00
h	6	Nos	1 to 3 module mounting box	E	143.00	Rs. One hundred & forty three only	858.00
i	50	Nos	8 module mounting box	E	251.00	Rs. Two hundred & fifty one only	12,550.00
j	50	Nos	3 / 5 module under box divider	E	41.00	Rs. Forty one only	2,050.00
k	6	Nos	Reducer 100 x 50 to 50 x 50 mm	E	221.00	Rs. Two hundred & twenty one only	1,326.00
l	6	Nos	Cable Retainer	E	119.00	Rs. One hundred & nineteen only	714.00
18			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>)				0.00
a	12	Nos	8 module metal box in recess	E	232.00	Rs. Two hundred & thirty two only	2,784.00
			<i>Group B modular accessories - S & F front plates</i>				0.00
b	12	Nos	8 module white/ off-white	E	187.00	Rs. One hundred & eighty seven only	2,244.00
19			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	130	Nos	6 A SP 1 way switch with indicator	E	138.00	Rs. One hundred & thirty eight only	17,940.00
b	50	Nos	16 A SP 1 way switch	E	161.00	Rs. One hundred & sixty one only	8,050.00
c	248	Nos	6A 3 pin shuttered socket	E	157.00	Rs. One hundred & fifty seven only	38,936.00
d	50	Nos	6/16 A socket	E	223.00	Rs. Two hundred & twenty three only	11,150.00
			<i>SH: SUPPLY & FIXING MCB DBs & ACCESSORIES</i>				

20			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	4 way (8+12) - three phase double cover (IP 42/43)	E	3,329.00	Rs. Three thousand three hundred & twenty nine only	3,329.00
b	3	Nos	8 way (8+24) - three phase double cover (IP 42/43)	E	4,783.00	Rs. Four thousand seven hundred & eighty three only	14,349.00
c	1	No	12 way single phase double cover (IP 42/43)	E	1,899.00	Rs. One thousand eight hundred & ninety nine only	1,899.00
21			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	63 A four pole mini break isolator	E	752.00	Rs. Seven hundred & fifty two only	752.00
b	3	No	40 A four pole mini break isolator	E	716.00	Rs. Seven hundred & sixteen only	2,148.00
c	1	No	63 A, 4 pole, 100 mA RCCB	E	3,306.00	Three thousand three hundred & six only	3,306.00
d	2	No	40 A, 4 pole, 100 mA RCCB	E	2,881.00	Rs. Two thousand eight hundred & eighty one only	5,762.00
e	1	No	40 A, 4 pole, 30 mA RCCB	E	2,780.00	Rs. Two thousand seven hundred & eighty only	2,780.00
f	1	No	25 A double pole mini break isolator	E	342.00	Rs. Three hundred & forty two only	342.00
g	1	No	25 A, 2 pole, 30 mA RCCB	E	2,023.00	Rs. Two thousand & twenty three only	2,023.00
22			S & F SP MCB				
a	80	Nos	6/10/16 A/20/25 SA SP MCB C curve 10 KA	E	219.00	Rs. Two hundred & nineteen only	17,520.00

			PANEL BOARD				
23	1	No	Supply conveyance installation testing and commissioning of 3 phase single cover Panel Board IP 41 (Load Bank enclosure) 6 Way with provision for fixing 4 pole MCCB as incomer and SP/TP/F P MCCBs as outgoing with out MCCBs comprising cable alley, Bare meter module for fixing digital Ammeter, Voltmeter with selector switch, add on module for fixing LED indicators, Earth fault relay including supply and fixing 1 No 35 KA Microprocessor based release 160A 4 pole MCCB set at 100 A(Ics-100% Icu), earth fault relay 125 to 160A, shunt release as incomer 5 Nos 63 A 4 pole MCCB thermal magnetic release 16 KA set at 40 A and 1 No 32 A 16 KA 4 pole MCCB set at 25 A as outgoings, Rotary handle and 1 No 0 -600 V Digital voltmeter with selector switch, 3 Nos digital Ammeters, LED indicators with control fuses etc as required and installed as directed at site	E	118,813.00	Rs. One lakh eighteen thousand eight hundred & thirteen only	118,813.00
24	40	Kg	Fabrication, supply, conveyance and installation of <i>angle iron frame work</i> for wall mounting panel board using suitable size angle iron cut and welded to shape including painting with two coats of synthetic enamel paint over a coat of zinc chromate primer, bolting the frame to the panel using required bolt and nuts, fixing the whole to the wall, making good the damages etc. as required.	kg	126.00	Rs. One hundred & twenty six only	5,040.00
			SH: CABLING				
25			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.				0.00
a	20	M	3.5c 70sqmm	m	502.00	Rs. Five hundred & two only	10,040.00
b	45	M	4 core 16 sq mm with factory made clamp	m	231.00	Rs. Two hundred & thirty one only	10,395.00

c	20	M	4 core 10 sq mm with factory made clamp	m	197.00	Rs. One hundred & ninety seven only	3,940.00
26			Supply & laying of one number PVC insulated and PVC sheathed armoured aluminium power cable of 1.1KV grade of the following sizes in ground including excavation of trench of size 35 x 75 cm, refilling the trench etc. as required but excluding sand cushioning and protective covering (in hard soil).				
a	20	M	3.5 core 70 sq mm	m	573.00	Rs. Five hundred & seventy three only	11,460.00
			PROTECTIVE PIPES TO CABLES				
27			<i>Supplying, laying and jointing</i> of the following sizes of double wall corrugated (<i>DWC</i>) pipes made out of HDPE conforming to IS 14930 Part II for mechanical protection to underground power cables with all required accessories in ground <i>in the existing trench</i>				
a	20	M	63 / 50 mm or nearest size	m	131.00	Rs. One hundred & thirty one only	2,620.00
			ROUTE - MARKER				
28	1	No	Supply route marker with 102mmx102mm <i>cast iron, spike</i> 5mm thick with inscription ' <i>LT Cable</i> ' there on bolted / welded to 35x35x6mm angle iron 60cm long and fixing the same in ground as required.	e	194.00	Rs. One hundred & ninety four only	194.00
			END TERMINATION OF CABLES				
29			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.				
a	2	Nos	70 sq mm	E	714.00	Rs. Seven hundred & fourteen only	1,428.00
b	6	Nos	16 sq mm	E	319.00	Rs. Three hundred & nineteen only	1,914.00

c	2	Nos	10 sq mm	E	271.00	Rs. Two hundred & seventy one only	542.00
			<i>EARTH CLAMPS</i>				
30			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	2	Nos	25 sq - 95sq mm with 20 mm wide x 1.20 mm thick clip	E	27.00	Rs. Twenty seven only	54.00
b	8	Nos	4sqmm-16 sq mm with 12 mm wide x 1 mm thick clip	E	18.00	Rs. Eighteen only	144.00
			<i>CABLE SOCKETS</i>				
31			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.				
a	2	Nos	35 sq mm	E	16.00	Rs. Sixteen only	32.00
b	6	Nos	70 sq mm	E	24.00	Rs. Twenty four only	144.00
c	24	Nos	16 sq mm	E	13.70	Rs. Thirteen & ps. seventy only	328.80
d	8	Nos	10 sq mm	E	12.70	Rs. Twelve & ps. seventy only	101.60
32			Supply and making outdoor / indoor end termination for 1.1 KV grade PVC/PILC/XLPE cables of the following sizes including supply of end sealing kit consisting of cable jointing compound, hardener, plastic mould, adhesive-cum-solvent, epoxy putty, earth continuity connection, spacers and PVC (NA) tape.				
a	1	No	3.5 Core 70 Sqmm	E	1,210.00	Rs. One thousand two hundred & ten only	1,210.00
			<i>EARTHING & EARTH CONDUCTORS</i>				

33	2	No	Supply and providing <i>plate earthing</i> 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. (<i>in ordinary rock - soft laterite soil</i>)	E	4,448.00	Rs. Four thousand four hundred & forty eight.	8,896.00
34			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				0.00
a	2	No	300 x 300 x 6 mm cast iron gully trap with covering	E	267.00	Rs. Two hundred & sixty seven only	534.00
35			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.				
a	0.6	M	2 x 25 x 3 mm GI strip	m	165.00	Rs. One hundred & sixty five only	99.00
36			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.				
a	4	M	4.75 mm bare copper conductor (6 SWG)	m	120.00	Rs. One hundred & twenty only	480.00
			SUPPLY & DRAWING EARTH CONDUCTORS				
37			Supply and drawing bare <i>earthing conductors</i> of the following sizes <i>along with wiring/ cables</i> and giving connection as required.				
a	130	M	2.65 mm copper conductor (12 SWG)	m	43.00	Rs. Fortythree only	5,590.00

38			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 hard soil</i>).				
a	30	M	4.75 mm copper conductor (6 SWG)	m	144.00	Rs. One hundred & forty four only	4,320.00
			<i>SOCKETS FOR earthing CONDUCTORS</i>				
39			supply of superior quality <i>copper earth socket</i> for the following sizes of earth conductor including crimping etc. as required.				
a	16	Nos	2.65 mm (12 SWG)	E	19.00	Rs. Nineteen only	304.00
b	12	Nos	4.75 mm (6 SWG)	E	31.00	Rs. Thirty one only	372.00
40			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	12 x 3 mm brass bolt & nut	E	11.30	Rs. Eleven & Ps. thirty only	67.80
b	10	Nos	25 x 3mm brass bolt & nut	E	17.00	Rs. Seventeen only	170.00
			<i>SH: PROTECTIVE PIPES TO EARTH LEADS/Cables</i>				
41			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.				
a	10	M	15 mm dia	m	90.00	Rs. Ninety only	900.00
b	3	M	50mm (Fixing the same on concrete post for protection of cable)	m	323.00	Rs. Three hundred & twenty three only	969.00
42	1	set	Supply and providing 3 Nos 150 A Porcelain fuse unit with 120 A HRC fuse and 150 A 2 way Neutral link on suitable size teak wood plank , fixing the same on concrete post using suitable size fabricated metal clamps with bolt and nut with washers etc as required	set	3,383.00	Rs. Three thousand three hundred & eighty three only	3,383.00
			Total				948,730.20

PAC Rs.9,48,730/- (Rs. Nine lakh Forty eight thousand seven hundred & thirty only)

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

2.% above estimate rate.

3. At the estimate rate.

UNIVERSITY ENGINEER

CONTRACTOR.