

UNIVERSITY OF KERALA							
ENGINEERING UNIT, KARIAVATTOM							
TENDER SCHEDULE FOR THE CONSTRUCTION OF TOILET, DRESSING ROOM, FENCING, GATE etc. TO THE KERALA UNIVERSITY LIBRARY CANTEEN, PALAYAM							
Sl No	Qty	Unit	Description of Item	unit	Rate	Rate in words	Amount
1	3	m ³	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. All kinds of soil.	m ³	222.30	Rupees Two hundred and twenty two and Paise thirty only	666.90
2	1.5	m ³	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	m ³	6,144.84	Rupees Six thousand one hundred and forty four and Paise eighty four only	9,217.26
3	4.5	m ³	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with: Cement mortar 1:6 (1 cement : 6 coarse sand). For foundation and basement.	m ³	5,597.59	Rupees Five thousand Five hundred and ninety seven and Paise fifty nine only	25,189.16
4	0.5	m ³	Plinth Beam : Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level: 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	m ³	8,900.78	Rupees Eight thousand Nine hundred and Paise seventy eight only	4,450.39
5	7.5	m ²	Centering and shuttering including strutting, propping etc. and removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilevers.	m ²	474.53	Rupees Four hundred and seventy four and Paise fifty three only	3,558.98

6	198	kg	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars.	kg	97.29	Rupees Ninety seven and Paise twenty nine only	19,263.42
7	8.5	m ³	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in Cement mortar 1:6 (1 cement : 6 coarse sand).	m ³	7,752.07	Rupees Seven thousand Seven hundred and fifty two and Paise seven only	65,892.60
8	12	m ²	Centering and shuttering including strutting, propping etc. and removal of form for : Suspended floors, roofs, landings, balconies and access platform.	m ²	573.82	Rupees Five hundred and seventy three and Paise eighty two only	6,885.84
9	1.5	m ²	Centering and shuttering including strutting, propping etc. and removal of form for : Edges of slabs and breaks in floors and walls. Under 20 cm wide.	m ²	166.29	Rupees One hundred and sixty six and Paise twenty nine only	249.44
10	2	m ³	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	m ³	9,683.68	Rupees Nine thousand Six hundred and eighty three and Paise sixty eight only	19,367.36
11	91	m ²	CEMENT PLASTER (IN COARSE SAND) : 12 mm cement plaster of mix: 1:4 (1 cement: 4 coarse sand).	m ²	246.16	Rupees Two hundred and forty six and Paise sixteen only	22,400.56

12	13	m ²	6 mm cement plaster of mix: 1:3 (1 cement : 3 fine sand).	m ²	192.44	Rupees One hundred and ninety two and Paise forty four only	2,501.72
13	3.06	m ²	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand): Flush/ Ruled pointing.	m ²	218.37	Rupees Two hundred and eighteen and Paise thirty seven only	668.21
14	2	m ³	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	m ³	160.58	Rupees One hundred and sixty and Paise fifty eight only	321.16
15	7	m ²	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigments etc., complete.	m ²	1,292.14	Rupees One thousand two hundred and ninety two and Paise fourteen only	9,044.98
16	10	m ²	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	m ²	1,195.28	Rupees One thousand One hundred and ninety five and Paise twenty eight only	11,952.80

17	33	kg	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D, F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design, (sectional weight of only steel members shall be measured for payment). 10.11.1 Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	kg	163.08	Rupees One hundred and sixty three and Paise eight only	5,381.64
18	1.5	m ²	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with: 4.0 mm thick glass panes.	m ²	1,092.10	Rupees One thousand and ninety two and Paise ten only	1,638.15
19	1	Nos.	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: W.C. pan with ISI marked white solid plastic seat and lid.	E	4,739.30	Rupees Four thousand Seven hundred and thirty nine and Paise thirty only	4,739.30
20	2	Nos.	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15 mm nominal bore.	E	872.40	Rupees Eight hundred and seventy two and Paise forty only	1,744.80

21	1	Nos.	Supplying and fixing PVC Floor Trap.	E	197.20	Rupees One hundred and ninety seven and Paise twenty only	197.20
22	8	m	Providing and fixing Polyvinyl Chloride (PVC) pipes, having water supply, including all PVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings, with one step PVC of solvent cement and the cost cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc. 25mm nominal outer dia pipes 12kg/cm ² .	m	154.17	Rupees Three hundred and two and Paise sixty eight only	1,233.36
23	6	m	Providing and fixing Polyvinyl Chloride (PVC) pipes, having water supply excluding all PVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step PVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-Charge. 110mm nominal outer dia pipes 6kg/cm ² (Trenching).	m	424.34	Rupees Four hundred and twenty three and Paise seventy one only	2,546.04
24	6	m	Providing and fixing Polyvinyl Chloride (PVC) pipes, having water supply including all PVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step PVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-Charge. 50mm nominal outer dia pipes 6kg/cm ² (Trenching).	m	181.77	Rupees One hundred and seventy seven and Paise thirteen only	1,090.62

25	6	m	Providing and fixing Polyvinyl Chloride (PVC) pipes, having water supply excluding all PVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step PVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-Charge. 75mm nominal outer dia pipes 4kg/cm ² (Trenching).	m	283.47	Rupees Two hundred and thirty three and Paise thirty five only	1,700.82
26	1	Nos.	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore. 15mm nominal bore.	E	725.33	Rupees Seven hundred and twenty five and Paise thirty three only	725.33
27	89	m ²	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer.	m ²	51.22	Rupees Fifty one and Paise twenty two only	4,558.58
28	89	m ²	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work.	m ²	115.01	Rupees One hundred and fifteen and Paise one only	10,235.89
29	10	m	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in-Charge.	m	655.68	Rupees Six hundred and fifty five and Paise sixty eight only	6,556.80

30	3.5	m ²	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing. 9.120.1 30 mm thick plain PVC door shutters.	m ²	3,928.22	Rupees Three thousand Nine hundred and twenty eight and Paise twenty two only	13,748.77
31	13	m ²	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade: New work (two or more coats) over and including water thinnable priming coat with cement primer.	m ²	128.15	Rupees One hundred and twenty eight and Paise fifteen only	1,665.95
32	70	kg	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	kg	101.29	Rupees One hundred and one and Paise twenty nine only	7,090.30

33	650	m	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used. With G.I. barbed wire.	m	18.50	Rupees eighteen and Paise fifty only	12,025.00
34	0.1	m ³	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc., up to floor five level, excluding the cost of centering, shuttering and finishing: 1:1½:3 (1 cement:1½ coarse sand:3 graded stone aggregate 20 mm nominal size).	m ³	9,935.26	Rupees Nine thousand nine hundred and thirty five and Paise twenty six only	993.53
35	255	m ²	Applying priming coat: With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works.	m ²	38.57	Rupees Thirty eight and Paise fifty seven only	9,835.35
36	260	m ²	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work.	m ²	106.29	Rupees One hundred and six and Paise twenty nine only	27,635.40

37	84	kg	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	kg	128.72	Rupees One hundred and twenty eight and Paise seventy two only	10,812.48
38	2	Nos.	Supplying and fixing 110mm PVC Tee	E	172.01	Rupees One hundred and seventy two and Paise one only	344.02
39	2	Nos.	Supplying and fixing 110mm PVC elbow	E	104.97	Rupees One hundred and four and Paise ninety seven only	209.94
40	2	Nos.	Supplying and fixing 75mm PVC elbow	E	92.61	Rupees Ninety two and Paise Sixty one only	185.22
TOTAL							Rs. 3,28,525.25

PAC Rs.3,28,525/- (Rupees Three Lakhs and Twenty eight thousand Five hundred and twenty five only)

I/We agreed to execute the work.

1.% below the estimate rate.

2. % above the estimate rate.

3. At the estimate rate.

CONTRACTOR

UNIVERSITY ENGINEER