

**UNIVERSITY OF KERALA  
ENGINEERING UNIT, KARIAVATTOM**

**TENDER SCHEDULE FOR WATER SUPPLY & SANITARY WORKS IN THE PURSE GRANT BUILDING AT KARIAVATTOM**

SI No	Qty	Unit	Description of Item	unit	Rate	Rate in words	Amount
<b>PART I-TOILET FITTINGS &amp; PLUMBING ITEMS</b>							
1	200	m	Supplying and fixing Poly vinyl Chloride (PVC) pipes,including all PVC plain & brass threaded fittingsincluding fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer in Charge. 25 mm nominal outer dia Pipes (12 kgf/cm2)	M	168.47	Rs. One hundred & sixty eight & ps. Forty seven only	33,694.00
2	100	m	Supplying and fixing Poly vinyl Chloride (PVC) pipes,including all PVC plain & brass threaded fittingsincluding trenching to a minimum depth of 0.50 m refilling etc.. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer in Charge. 25 mm nominal outer dia Pipes (12 kgf/cm2)	M	141.11	Rs. One hundred & forty one & ps. eleven only	14,111.00
3	100	m	Supplying and fixing Poly vinyl Chloride (PVC) pipes,including all PVC plain & brass threaded fittingsincluding fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer in Charge. 32 mm nominal outer dia Pipes (12 kgf/cm2)	m	188.70	Rs. One hundred & eighty eight & ps. seventy only	18,870.00

4	250	m	Supplying and fixing Poly vinyl Chloride (PVC) pipes,including all PVC plain & brass threaded fittingsincluding trenching to a minimum depth of 0.50 m refilling etc.. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer in Charge. 32 mm nominal outer dia Pipes (12 kgf/cm2)	m	149.07	Rs. One hundred & forty nine & ps. seven only	37,267.50
5	50	m	Supplying and fixing Poly vinyl Chloride (PVC) pipes,including all PVC plain & brass threaded fittingsincluding trenching to a minimum depth of 0.50 m refilling etc.. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer in Charge. 40 mm nominal outer dia Pipes (12 kgf/cm2)	m	163.38	Rs. One hundred & sixty three & ps. thirty eight only	8,169.00
6	1	No	Making connection with 90 mm PVC distribution line and 32 mm PVC line. This includes trenching and opening the 90 mm Main line without breakage, boring the pipe, providing 90X32 mm PVC saddle piece, 32 mm brass ferule, adapter etc and refilling trenches etc. as per the direction of the departmental authorities	E	530.04	Rs. Five hundred & thirty & ps. four only	530.04
7	4	Nos	Providing and fixing gun metal gate valve with C.I. wheel of approvedquality (screwed end) : 25 mm nominal dia bore	each	590.36	Rs. Five hundred & ninety & ps. thirty six only	2,361.46
8	2	Nos.	Providing and fixing gun metal gate valve with C.I. wheel of approvedquality (screwed end) : 32 mm nominal dia bore	E	690.48	Rs. Six hundred & ninety & ps. forty eight only	1,380.96

9	150	m	Providing and fixing 110 mm Poly vinyl Chloride (PVC) pipes ( 6 Kgf/cm <sup>2</sup> ). This includes jointing of pipes & fittings with one step PVC solvent cement,trenching to a minimum depth of 0.80 m,refilling & testing of joints complete as per direction of Engineer in Charge.	M	346.84	Rs. Three hundred & forty six & ps. Eighty four only	52,026.00
10	200	m	Providing and fixing 110 mm Poly vinyl Chloride (PVC) pipes (4 Kgf/cm <sup>2</sup> ). This includes jointing of pipes & fittings with one step PVC solvent cement,fixing to wall with clamps at 0.60 m interval & testing of joints complete as per direction of Engineer in Charge.	M	337.63	Rs.Three hundred & thirty seven & ps. Sixty three only	67,526.00
11	24	nos	Supplying 110 mm PVC plain elbow	E	282.24	Rs.Two hundred & eighty two & ps. twenty four	6,773.76
12	6	nos	Supplying 110 mm PVC tee	E	328.70	Rs. Three hundred & twenty eighty & ps. seventy only	1,972.20
13	10	nos	Supplying 110 mm PVC plain bend	E	450.60	Rs. Four hundred & fifty & ps. sixty only	4,506.00
14	8	nos	Supplying 110 mm PVC door tee	E	381.29	Rs. Three hundred & eighty one & ps. twenty nine only	3,050.32
15	16	nos	Supplying 110 mm PVC door elbow	E	316.48	Rs. Three hundred & sixteen & ps. forty eight only	5,063.68
16	4	Nos	Supplying 110 mm PVC vent cowl	E	145.27	Rs. One hundred & forty five & ps. twenty seven only	581.08
17	5	Nos	Supplying 110 mm PVC "Y"	E	328.71	Rs. Three hundred & twenty eighty & ps. seventy one only	1,643.55

18	100	m	Supplying and fixing Poly vinyl Chloride (PVC) pipes,including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer in Charge.63 mm nominal outer dia Pipes (6 kgf/cm2)	M	187.47	Rs. One hundred & eighty seven & ps. Forty seven only	18,747.00
19	100	m	Providing and fixing 63 mm Poly vinyl Chloride (PVC) pipes ( 6 Kgf/cm2). This includes jointing of pipes & fittings with one step PVC solvent cement,trenching to a minimum depth of 0.80 m,refilling & testing of joints complete as per direction of Engineer in Charge.	M	173.67	Rs. One hundred &seventy three & ps. Sixty seven only	17,367.00
20	20	nos	Supplying and fixing 63 mm PVC elbow	E	105.40	Rs. One hundred & five & ps. forty only	2,108.00
21	12	nos	Supplying and fixing 63 mm PVC door elbow	E	144.53	Rs. One hundred & forty four & ps. fifty three only	1,734.36
22	8	nos	Supplying and fixing 63 mm PVC tee	E	120.07	Rs. One hundred & twenty & ps. seven only	960.56
23	8	nos	Supplying and fixing 63 mm PVC door tee	E	159.20	Rs. One hundred & fifty nine & ps. twenty only	1,273.60
24	6	Nos	Supplying and fixing 110X63 mm 3way PVC floor trap	E	196.20	Rs. One hundred & ninety six & ps. Twenty only	1,177.20

25	8	nos	Providing and fixing white Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests(water closet squatting pan -Indian type W.C.pan)with 100mm sand cast iron P or S trap 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.	E	4,506.05	Rs. Four thousand five hundred & six & ps. five only	36,048.36
26	8	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 PVC 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	4,401.86	Rs. Four thousand four hundred & one & ps. eighty six only	35,214.88
27	12	nos	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	E	2,720.46	Rs. Two thousand seven hundred & twenty & ps. forty six only	32,645.52
28	2	nos	Providing and fixing C.P. brass bib cock of approved quality conformingto IS:8931 : 15 mm nominal bore.	E	635.59	Rs. Six hundred & thirty five & ps. fifty nine only	1,271.18

29	12	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	840.97	Rs. Eight hundred & forty & ps. ninety seven only	10,091.64
30	1	No	Supplying 15 mm water meter with ISI mark approved make with test certificate	E	1,800.00	Rs. One thousand & eight hundred only	1,800.00
31	1	No	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	E	395.50	Rs. Three hundred & ninety five & ps. fifty only	395.50
32	2000	litre	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	litre	8.69	Rs. Eight & ps. sixty nine only	17,388.00
33	2	Nos	Supplying and fixing 15 mm brass ball valve with polythene float of approved make and quality	E	395.44	Rs. Three hundred & ninety five & ps. forty four only	790.88
34	2	Nos	Supplying and fixing 32 mm CPVC tank connector suitable for PVC water tanks	E	346.88	Rs. Three hundred & forty six & ps. eighty eight only	693.76
			<b>TOTAL</b>				<b>4,39,233.99</b>
<b>PART II MANHOLE CONSTRUCTION</b>							
1	4	m <sup>3</sup>	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 <sup>3</sup>	202.17	Rs. Two hundred & two & ps. seventeen only	808.68

2	0.75	m <sup>3</sup>	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 <sup>3</sup>	5,410.49	Rs. Five thousand four hundred & ten & ps. forty nine only	4,057.87
3	4	m <sup>3</sup>	Providing and fixing up to floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	m <sup>3</sup>	10,892.89	Rs. Ten thousand eight hundred & ninety two & ps. eighty nine only	43,571.56
4	1	m <sup>3</sup>	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	m <sup>3</sup>	6,791.95	Rs. Six thousand seven hundred & ninety one & ps. ninety five only	6,791.95
5	50	kg	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Mild steel and Medium Tensile steel bars	kg	88.39	Rs. Eighty eight & ps. thirty nine only	4,419.50
6	5	m <sup>2</sup>	Centering and shuttering including strutting,propping etc. and removal of form for :Suspended floors, roofs, landings, balconies and access platform	m <sup>2</sup>	257.23	Rs. Two hundred & fifty seven & ps. twenty three only	1,286.15
7	3	m <sup>3</sup>	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth ,cement mortar using 1:6.	m <sup>3</sup>	6,412.17	Rs. Six thousand four hundred & twelve & ps. seventeen only	19,236.51
8	15	m <sup>2</sup>	Plastering with cement mortar 1:4, 12 mm thick one coat using fine sand	m <sup>2</sup>	200.65	Rs. Six hundred & ps. sixty five	3,009.75
9	5	m <sup>2</sup>	Cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement. 12 mm cement plaster	m <sup>2</sup>	276.83	Rs. Two hundred & seventy six & ps. eighty three only	1,384.15

			<b>TOTAL</b>				<b>84,566.12</b>
<b>PART III -CONSTRUCTION OF SEPTIC TANK - 3.60x2.20x1.40 m</b>							
1	30	m <sup>3</sup>	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 <sup>3</sup>	202.17	Rs. Two hundred & two & ps. seventeen only	6,065.10
2	1	m <sup>3</sup>	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 40mm nominal size)	m <sup>3</sup>	5,410.49	Rs. Five thousand four hundred & ten & ps. forty nine only	5,410.49
3	0.6	M <sup>3</sup>	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in all shapes and sizes in cement mortar 1:6.	M <sup>3</sup>	6,412.17	Rs. Six thousand four hundred & twelve & ps. seventeen only	3,847.30
4	4	m <sup>3</sup>	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	m <sup>3</sup>	6,791.95	Rs. Six thousand seven hundred & ninety one & ps. ninety five only	27,167.80
5	50	m <sup>2</sup>	Centering and shuttering including strutting,propping etc. for walls (any thickness) including attached pillaster butteresses, plinth and string courses etc.	sqm	461.61	Rs. Four hundred & sixty one & ps. sixty one only	23,080.50
6	330	kg	Steel reinforcement for R.C.C. work including, straightening, cutting, bending, placing in position and binding all complete upto plinth level. Mild steel and Medium Tensile steel bars	kg	88.39	Rs. Eighty eight & ps. thirty nine only	29,168.70



7	45	m <sup>2</sup>	Cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat 12 mm cement plaster cement.	m <sup>2</sup>	276.83	Rs. Two hundred & seventy six & ps. eighty three only	12,457.35
			<b>TOTAL</b>				<b>1,07,197.24</b>
<b>PART IV -CONSTRUCTION OF SOAK PIT-1.20x1.20x1.20 m</b>							
1	1	each	Constructing soak pit 1.20x1.20x1.20 m filled with brickbats including earth work,complete as per standard design.	each	2,828.24	Rs. Two thousand eight hundred & twenty eight & ps. twenty four only	2,828.24
2	0.3	m <sup>3</sup>	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 <sup>3</sup>	5,410.50	Rs. Five thousand four hundred & ten & ps. fifty only	1,623.15
3	2.2	m <sup>3</sup>	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth ,cement mortar using 1:6	m <sup>3</sup>	6,412.17	Rs.Six thousand four hundred & twelve & ps. seventeen only	14,106.77
4	0.5	m <sup>3</sup>	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) over the ramp work	m <sup>3</sup>	6,791.95	Rs. Six thousand seven hundred & ninety one & ps. ninety five only	3,395.98
5	20	sqm	Centering and shuttering including strutting,propping etc. and removal of form for :Suspended floors, roofs, landings, balconies and access platform	sqm	513.08	Rs. Five hundred & thirteen & ps. eight only	10,261.68

5	2	m	Providing and fixing 110 mm Poly vinyl Chloride (PVC) pipes, having including all CPVC 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.	M	436.30	Rs. Four hundred & thirty six ps. thirty only	872.60	
6	40	kg	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Mild steel and Medium Tensile steel bars	kg	88.39	Rs. Eighty eight & ps. thirty nine only	3,535.60	
			Total				<b>36,624.02</b>	
<b>GRAND TOTAL</b>								<b>6,67,621.36</b>

**PAC Rs.6,67,621/- (Rs. Six lakhs sixty seven thousand six hundred & twenty one only)**

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

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

UNIVERSITY ENGINEER

CONTRACTOR