

**PONDICHERY UNIVERSITY**  
**ENGINEERING WING**

**SCHEDULE OF WORK**

Name of the work: Construction of toilet, aluminum partition and false ceiling at PUTA office and Faculty club

S.No.	Description	Qty.	Rate Rs.P.	Unit	Amount Rs.P.
1	<b>Code No: 15.2.1</b>				
	Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead - 1:3:6 or richer mix.	1.00		Cum	
2	<b>Code No: 15.7.4</b>				
	Demolishing brick work, manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead - In cement mortar.	0.25		Cum	
3	<b>Code No: 2.8.1</b>				
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms , lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed , within a lead of 50m -All kinds of	6.50		Cum	
4	<b>Code No: 2.27</b>				
	Supplying and filling in plinth with sand under floors including, watering, ramming consolidating and dressing complete.	1.00		Cum	
5	<b>Code No: 2.25</b>				
	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 upto	2.50		Cum	

	50m and lift upto 1.5m.				
6	<b>Code No: 4.1.8</b>				
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering.- All work upto plinth level -1:4:8 (1 cement:4coarse sand : 8 graded stone aggregate 40mm nominal size)	2.00		Cum	
7	<b>Code No: 2.27B</b>				
	Supplying and filling with red earth (excluding rock) including cost and conveyance to the work site and stacking to the departmental gauge, spreading in layers not exceeding 20cm in depth, watering and consolidation using 0.5 tonne roller, or wooden or steel rammers etc.complete for making play fields, running tracks and court yards.	2.00		Cum	
8	<b>Code No: 5.3.1</b>				
	Reinforced cement concrete work in beams suspended floors, roofs having slope upto 15 degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centering, shuttering,finishing and reinforcement with 1:1.5:3 (1 cement :1.5 coarse sand : 3 graded stone aggregate 20mm nominal size).	0.75		Cum	
9	<b>Code No: 5.9.5</b>				
	Centring and shuttering including strutting, propping etc. and removal of form for: lintels, beams, plinth beams, girders, bressumers and cantilevers.- Using steel sheet with M.S.frames	5.00		Sqm	
10	<b>Code No: 5.22.7</b>				
	Reinforcement for R.C.C work including straightening , cutting , bending , placing in position and binding all complete - Thermo - Mechanically treated bars(ISI	100.00		Kg	

	BRAND OF APPROVED MAKE) including placing the M30 grade Athees make cover block @ 60cm centre to centre.				
11	<b>Code No: 6.1.2</b>				
	Brick work with FPS bricks of class cum designation 35 in foundation and plinth in cement mortar 1:6 (1 cement : 6 coarse sand)	3.00		Cum	
12	<b>Code No: 6.4.2</b>				
	Brick work with FPS bricks of class designation 35 in superstructure above plinth level upto floor V level in all shapes and sizes in cement mortar 1:6 (1 cement : 6 coarse sand)	6.50		Cum	
13	<b>Code No: 6.13.1</b>				
	Half brick masonry with FPS bricks of class designation 35 in superstructure above plinth level upto floor V level in cement mortar 1:3 (1 cement: 3 coarse sand)	5.00		Sqm	
14	<b>Code No: 9.119</b>				
	Providing and fixing factory made P.V.C. door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and joined with 2nos.of 150mm long brackets of 15x15mm M.S.square tube, the vertical door profiles to be reinforced with 19x19mm M.S.square tube of 19 gauge,EDM 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 65/100mm size complete as per anufacturers specification .	21.00		Rmt	
15	<b>Code No: 9.120.1</b>				
	Providing and fixing to existing door frames - 30mm thick factory made solid panel PVC door shutter consisting of frame made out of M.S.tubes of 19 gauge thickness and size of 19mm x 19mm for stiles, top	8.00		Sqm	

	<p>&amp; bottom rails . M.S.frame shall have a coat of steel primers of approved make and manufacture M.S.frame covered with 5mm thick heat moulded PVC 'C channel of size 30mm thickness, 110mm width out of which 90mm shall be flat and 20mm shall be tapered in 45 degree angle on either side forming stiles; and 5mm thick , 110mm wide PVC sheet out of which 90mm shall be flat and 20mm shall be tapered on the inner side to form top and bottom rail and 130mm wide PVC sheet out of which 90mm shall be flat and 20mm shall be tapered on both sides to form lock rail.Top bottom and lock rails shall be provided either side of the panel. 10mm(5mmx 2) thick , 20mm wide cross PVC sheet shall be provided as gap insert for top rail &amp; bottom rail. Panelling of 5mm thick PVC sheet to be fitted in the M.S.frame welded/sealed to the stiles &amp; rails with 7mm (5mm + 2mm) thick x 15mm wide PVC sheet bending on inner side , and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C channel using PVC solvent adhesive etc.complete manufactures specification &amp; drawing.</p>				
16	<b>Code No: 18.15.1</b>				
	Providing and fixing brass bib cock of approved quality - 15 mm nominal bore.	2.00		Each	
17	<b>Code No: 18.21.2.1</b>				
	Providing and fixing uplasticised PVC connection pipe with brass unions 45 cm length 15 mm nominal bore.	4.00		Each	
18	<b>Code No: 17.28.1.1</b>				
	Providing and fixing PVC waste	2.00		Each	

	pipe for sink or wash basin including PVC waste fittings complete - Semi rigid pipe - 32mm dia.				
19	<b>Code No: 17.2.1</b>				
	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 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.	1.00		Each	
20	<b>Code No: 17.1.2</b>				
	Providing and fixing 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 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 : Stainless steel AISI - 304(18/8) Orissa pattern W.C.pan of size 585x480mm with flush pipe and integrated type foot rests.	1.00		Each	
21	<b>Code No: 17.7.3</b>				
	Providing and fixing wash basin with CI brackets, 15mm CP brass pillar taps 32 mm CP brass waste of standard pattern including painting of fittings and brackets, cutting and making good the walls wherever required White vitreous china wash basin size 550x400mm with a pair of 15mm brass pillar taps.	2.00		Each	
22	<b>Code no: MR.</b>				
	Providing and fixing PVC 110 x 75 PVC floor trap with stiff mixer of cement mortar 1:1 (1 cement: 1 fine	4.00		Each	

	sand)				
23	<b>Code no: 11.38.2</b>				
	Providing and laying ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of commercial quality conforming to IS: 15622 of approved make (Bell / Johnson / Regency / Somany / Naveen / Asian ) in all colors, shades, except white, ivory, grey, fume red brown laid on 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigments etc., complete.	9.00		Sqm	
24	<b>Code no: 11.36A</b>				
	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacture of approved make (Jhonson / Asian / Somany / Nitco) in all colours, shades of size 200 x 300 mm as approved in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm Including pointing in white cement mixed with pigment of matching shade complete. - size 200x300mm	22.00		Sqm	
25	<b>Code no: 11.52</b>				
	Providing and fixing PVC corner beading of required size to suit the thickness of the wall tile at the corner joints of dado works	11.00		Rmt.	
26	<b>Code No: 9.97.4</b>				
	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc.complete : - 150x10mm	12.00		Each	
27	<b>Code Mo: 9.100.1</b>				
	Providing and fixing aluminium	20.00		Each	

	handles ISI marked anodised (anodic coating not less than grade as per 10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc.complete :-125mm				
28	<b>Code No: 9.100.2</b>				
	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade as per 10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc.complete :-100mm	20.00		Each	
29	<b>Code No: 9.101.1</b>				
	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete - Twin rubber stopper	4.00		Each	
30	<b>Code No: 17.78.1</b>				
	Providing and fixing CP brass health faucet of approved quality - 15mm nominal bore	2.00		Each	
31	<b>Code No: MR</b>				
	Providing and fixing Stainless steel grating for floor trap	4.00		Each	
32	<b>Code No: MR</b>				
	Providing and fixing PVC pipe complete with fittings and clamps including cutting and making good the walls etc., (internal work) exposed on a wall 20mm nominal outer dia pipe.	50.00		Rmt	
33	<b>Code No: 21.1.1.1</b>				
	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS : 733 and IS : 1285, fixed with rawl plugs and	94.00		Kg	

	<p>screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC / neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings. (Glazing and panelling to be paid for separately) : For fixed portion. Anodised aluminium (anodised transparent or dyed to required shade according to IS : 1868, Minimum anodic coating of grade AC 15)</p>				
34	<b>Code No: 21.1.2.1</b>				
	<p>Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS : 733 and IS : 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC / neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings. (Glazing and panelling to be paid for separately) : For shutters of doors, windows and ventilators including providing and fixing hinges / pivots</p>	30.00		Kg	



	and making provision for fixing of fittings wherever required including the cost of PVC / neoprene gasket required (fittings shall be paid for separately) Anodised aluminium (anodised transparent or dyed to required shade according to IS : 1868, minimum anodic coating of grade AC15).				
35	<b>Code No: 21.2.1</b>				
	Providing and fixing 9mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS : 12823 grade 1 type II in paneling fixed in aluminium doors, windows, shutters and partition frames with C.P. brass / stainless steel screws etc., complete as per architectural drawings. Prelaminated particle board with decorative lamination on one side and balancing lamination on other side.	20.00		Sqm	
36	<b>Code No: 9.84</b>				
	Providing and fixing IS:3564 make aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws B60etc.complete	2.00		Each	
37	<b>Code No: 9.113</b>				
	Providing and fixing bright finished 100mm mortice lock with 6 levers without pair of handles for aluminium door with necessary screws etc complete (best make of approved quality)	2.00		Each	
38	<b>Code No: 12.45.1</b>				
	Providing and fixing at all height false ceiling including providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanised in accordance with zinc coating of grade 350 as per IS :277 and consisting of angle cleats of size	132.00		Sqm	

	<p>25mm wide X 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to ceiling with dash fastener 12.5mm dia X 40mm long with 6mm dia bolts to the angle hangers of 25X25X0.55mm of required length, and other end of angle hanger being fixed with nut and bolts to the G.I. channels 45X15X0.9mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to G.I. channel with connecting clips made out of 2.64mm dia X 230mm long G.I. wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall / partition with the help of rawl plugs at 450mm centre to centre with 25mm long drive-all screws @ 230mm interval including jointing and fixing to a flush finish of tapered and square edges of the board with recommended filler, jointing tapes, finisher and two coats of primer suitable for board as per manufactures specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitable fixed all complete as per drawing and specification but excluding the cost of painting with : 12.5mm thick tapered edge gypsum board conforming to IS: 2095 - part I,</p>				
39	<b>Code No: 13.2.1</b>				

	15 mm cement plaster on rough side of single or half brick wall of mix - cement mortar 1:4 (1 cement : 4 fine sand)	53.00		Sqm	
40	<b>Code No: 13.3.1</b>				
	20mm cement plaster of mix 1:4 (1cement : 4 fine sand)	35.00		Sqm	
41	<b>Code No: 13.60.1A</b>				
	Wall painting with plastic emulsion paint - Royal of approved brand and manufacture to give an even shade - two or more coats on new work	220.00		Sqm	
42	<b>Code No: 12.41.2</b>				
	Providing and fixing on wall face unplasticised rigid PVC rain water pipes conforming to IS : 13592 type A including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion, (i) single socketed pipes. 110mm diameter.	30.00		Rmt	
43	<b>Code No: 12.42.6.2</b>				
	Providing and fixing on wall face unplasticised- PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS : 13592 type A including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion. Shoe (plain)110mm shoe.	1.00		Each	
44	<b>Code No: 10.16.1</b>				
	Steel work in built up tubular trusses including cutting, hoisting fixing in position and applying a priming coat of approved steel primer welded and bolted including special shaped washers etc. complete. Hot finished welded type tubes.	100.00		Kg	
45	<b>Code No: 12.70</b>				
	Providing and fixing colour coated galvalume sheet of 550 M.P.A yield of AZ 150 strength formed as per patterned steel rib profile with the depth of 31mm pitch of 250mm and overall width of 1060mm and	15.00		Sqm	

	thickness 0.5mm with required J or C hook bolts and nets 8mm dia G.S paint and working etc., complete excluding the cost of purlin , rafter and truss etc.,				
46	<b>Code No: 13.61.1</b>				
	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade - Two or more coats on new work.	10.00		Sqm	
47	<b>Code No: 12.42.3.2</b>				
	Providing and fixing on wall face unplasticised- PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS : 13592 type A including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion. Single Tee with door 110X110X110mm.	1.00		Each	
48	<b>Code No: 17.4.1</b>				
	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350xmm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and CP brass spreaders with brass unions and G.I clamps complete, including paintings of fittings and brackets, cutting and making good the walls and floors wherever required. One urinal basin with 5 litre white PVC automatic flushing cistern.	1.00		Each	
49	<b>Code No: 18.53.1</b>				
	Providing and fixing CP brass angle valve for basin mixer and geyser points of approved quality conforming to IS 8931 - 15 mm nominal bore.	5.00		Each	
50	<b>Code No: 18.18.1.2</b>				
	Providing and fixing ball valve (brass) of approved quality complete. high or low pressure with plastic floats - 20 mm nominal bore.	1.00		Each	

51	<b>Code No: 21.3.2</b>				
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc., with PVC / neoprene gasket etc., complete as per the architectural drawings. (cost of aluminium snap beading shall be paid in basic item) : With float glass panes of 5mm thickness.	12.00		Sqm	
52	<b>Code No:5.18.2</b>				
	Providing precast cement concrete jali 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centring and shuttering , roughening cleaning , fixing and finishing in cement mortar 1:3 (1 cement : 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits - 40mm thick.	1.50		Sqm	
53	<b>Code No:5.12.1</b>				
	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 m lead - Of area 3 sq. metres and below.	2.00		each	
	<b>Total</b>				

I hereby abide the rules and regulations stipulated in the CPWD form no. 6 & 8.

**Contractor**

**Executive Engineer**