

PONDICHERY UNIVERSITY
ENGINEERING WING

SCHEDULE OF WORK

Name of the work: Renovation of toilet at Department of management studies

S. No.	Description	Qty.	Rate Rs.P.	Unit	Amount Rs.P.
1 5.13	Providing , hoisting and fixing upto floor five level precast reinforced cement concrete in small lintels not exceeding 1.5 m clear span upto floor five level , including the cost of required centering , shuttering but excluding the cost of reinforcement , with 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	0.10		cum	
2 5.22.6	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 (TISCO / VIZAG / IISCO / SAIL / JSW) Fe - 415 or more	10.00		kg	
3 9.100.3	Providing and fixing aluminium handles 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 :-75mm	28.00		Each	
4 9.97.5	Providing and fixing aluminum tower bolts ISI marked anodized (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 :- 100x10mm	28.00		Each	
5 9.96.2	Providing and fixing aluminium sliding door 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 nuts and screws etc complete - 250 X 16 mm	4.00		Each	
6 9.119	Providing and fixing factory made P.V.C door frame of size 50x 47 mm with a wall thickness of 5mm , made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 nos , of 150mm long brackets of 15 x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19 x19 mm M.S.square tube of 19 gauge , EPDM rubber gasket weather seal to be provided throughout 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 side PVC sheet to be fitted in the M.S. frame welded /	70.00		Meter	

	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 manufacturer's specification & drawing - 30mm thick plain PVC door shutters				
7 9.120.1	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 15 x15 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 30mm 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. 10mm (5 mm x 2) thick , 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail , panelling 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 manufacturer's specification & drawing - 30mm thick plain PVC door shutters	23.00		Sqm	
8 9.1.2P	Providing wood work in frames of doors , windows, clerestory windows and other frames , wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia& length (hold fast lugs or dash fastener shall be paid for separately) -Padak wood	0.10		cum	
9 9.20.1	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) decorative type , core of block board construction with frame of 1 st class hard	2.00		sqm	

	wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters – 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws				
10 9.48.2	Providing and fixing M.S.grills of required pattern in frames of windows etc with M.S. flats , square or round bars etc. including priming coat with approved steel primer all complete - Fixed to openings / wooden frames with rawl plugs screws etc	165.00		Kg	
11 10.5.1	Providing and fixing 1mm thick M.S.sheet door with frame of 40x40x6 mm angle iron and 3mm M.S.gusset plates at the junctions and corners , all necessary fittings complete, including applying a priming coat of approved steel primer - Using M.S.angles 40x40x6mm for diagonal braces	6.00		Sqm	
12 11.36B	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) , of approved make (Jhonson / Asian / Somany / Nitco) in all colours , shades of size 300 x 450 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 with pigment of matching shade complete – size 300x450 mm	311.00		Sqm	
13 11.40.1	Providing and laying rectified ceramic rustic / matt finish floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer) of 1 st quality conforming to IS:15622 of approved\ make (Somany / Nitco) in all colours , shades, except white, ivory, grey, fume red brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigments etc., complete	110.00		Sqm	
14 14.4.1	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete to match existing surface i/c disposal of mulba / rubbish to the nearest dumping ground - for door/window/clerestory window	2.50		sqm	
15	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the	210.00		Sqm	

14.46	surface smooth including necessary repairs to scratches etc complete				
16 14.80. 2	Providing & fixing white vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material i/c malba , all complete - Orissa pattern W.C.Pan of size 580x440 mm	9.00		No	
17 14.1.1	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 metres lead -With cement mortar 1:4 (1 cement : 4 finesand)	40.00		Sqm	
18 15.2.1	Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead – nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	2.00		Cum	
19 15.23. 1	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead – for thickness of tiles 10mm to 25mm	415.00		Sqm	
20 15.12. 1	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead - of area 3 sqm and below	11.00		Each	
21 15.12. 2	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead - of area beyond 3 sq.metres	2.00		Each	
22 15.52	Dismantling of flushing cistern of all types (C.I / PVC / Vitrous china) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead	10.00		Each	
23 17.78. 1	Providing and fixing CP brass health faucet of approved quality - 15 mm nominal bore	5.00		Each	
24 17.18. 2	Providing and fixing P.V.C.low level flushing cistern with manually controlled device (handle lever) conforming to IS:7231, with all fittings and fixtures complete - 10	10.00		Nos	

	litre capacity -coloured				
25 17.7.2	Providing and fixing wash basin with C.I. brackets, 15mm 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 required - white Vitreous China wash basin size 630x450 mm with a single 15 mm C.P.brass pillar taps	11.00		Each	
26 17.28. 2.2	Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC waste fittings complete - flexiple pipe - 40mm dia	17.00		Each	
27 17.81	Providing and fixing floor mounted , white vitreous china single piece, double traps syphonic water closet of approved brand / make , shape, size and pattern including integrated white vitreous china cistern of capacity 10 litres with dual flusing system , including all fittings and fixtures with seat cover , cistern fittings , nuts, bolts and gasket etc including making connection with the existing P/S trap , complete in all respect	5.00		Each	
28 17.80	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610x390x370 mm having pre & post flushing with water (250ml & 500 ml consumption) , having water inlet from back side, including fixing to wall with suitable brackets all as per manufactures specification	6.00		Each	
29 17.32. 4	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6mm thick hard board backing - rectangular shape 1500 x 450 mm	10.00		Each	
30 18.74. 2	Providing and fixing un plasticised P.V.C. connection pipe with PTMT nuts, collar, and bush of approved quality and colour - 15 mm nominal bore with 45cm lengthh	30.00		Each	
31 18.53. 1	Providing and fixing C.P.brass angle valve for basin mixer and geyser points of approved quality conforming to IS: 8931- 15 mm nominal bore	30.00		Each	
32 18.8.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings , with one step CPVCsolvement	75.00		Meter	

	cement and the cost of cutting chases and making good the same including testing of joints complete - Concealed work , including cutting chases and making good the wall etc - 25 mm nominal outer dia pipes				
33 18.76. 1	Cutting holes upto 30x30 cm in walls including making good the same – with common burnt clay F.P.S.(non - modular) brick	10.00		Each	
34 18.51. 1	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	15.00		Each	
35 19.5.1	Dismantling of old S.W.pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps - 100 mm diameter	90.00		Meter	
36 19.33. 1	Providing and fixing on wall / column face unplasticised - PVC soil and waste pipes (type - B) conforming to IS : 13592- 1992 including jointing with seal ring conformation to IS : 5382 leaving 10mm gap for thermal expansion - single socked pipes - 110mm diameter	20.00		Meter	
37 19.33. 2	Providing and fixing on wall / column face unplasticised - PVC soil and waste pipes (type B) conforming to IS :13592 – 1992 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Single socketed pipes 75mm diameter	90.00		Meter	
38 19.33. 1A	Providing and fixing on wall face / column face unplasticised - PVC moulded fittings / accessories for unplasticised - PVC soil and waste pipes conforming to IS : 14735 -1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Single tee with door - 110 x110x110 mm	10.00		Each	
39 19.33. 1D	Providing and fixing on wall face / column face un plasticised - PVC mould fittings / accessories for unplasticised - PVC soil and waste pipes conforming to IS : 14735 – 1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - bend with door 110	10.00		Each	
40 19.33.	Providing and fixing on wall / column face unplasticised - PVC moulded fittings / accessories for unplasticised - PVC soil and	10.00		Each	

2A	waste pipes conforming to IS :14735 -1999 including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion - Single tee with door - 75x75x75mm				
41 19.21. 1	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary	2.00		Each	
42 19.4. 3.2	Providing and fixing square - mouth S.W.gully trap class SP -1 complete with C.I. grating brick masonry chamber with water tight C.I.cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design - 180x150mm size P type - with sewer bricks conforming to IS:4885	5.00		Each	
43 21.1.1. 3	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, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions , i.e at top, bottom and sides with required EPDM rubber / neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling , C.P.brass / stainless steel screws , all complete as per architectural drawings (Glazing, paneling and dash fasteners to be paid for separately) - for fixed portion - Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	80.00		kg	
44 21.1.2. 2	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, fixing with dash fasteners of required dia and size, including necessary filling up the gaps awith required EPDM rubber / neoprene gasket etc.	40.00		kg	

	Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling , C.P.brass / stainless steel screws , all complete as per architectural drawings (Glazing, paneling and dash fasteners to be paid for separately) - for shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (fittings shall be paid for separately) - Powder coated aluminium (minimum thickness of powder coating 50 micron)				
45 21.17.3	Providing and fixing Anodised aluminium , minimum anodic coating of grade AC 15 grill of required pattern / design over the doors, windows and ventilators etc., including fixing (but excluding the cost of the sections, which will be paid separately	8.00		Kg	
46 21.2.2	Providing and fixing 12 mm thick pre laminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 grade I type II , in paneling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings- Pre - laminated particle board with decorative lamination on both sides	10.00		sqm	
47 21.4.1	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS:6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors including cost of cutting floors , embedding in floors as required and making good the same matching to the existing floor finishing	4.00		Each	
48 31.162.1D	Providing, laying and jointing UPVC pipes(Finolex / jain / Supreme / Truebore / Nandi) (0.4 Mpa)conforming to IS specification 4985 and ISI marked including transportation to the site , lowering to the trenches, laying to proper grade and alignment, testing of joints with required testing equipment, including cost of solvent cement, excluding UPVC specials such as bends, tees, threaded pieces , couplers, reducer, endcaps etc., complete all as per IS	80.00		metre	

	and CPWD specification. - 110mm dia				
49 2.13.1. 2	Excavating trenches of required width for pipes, cables , etc, including excavation for sockets, depth upto 1.5m including getting out the excavated materials , returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layers by ramming ,watering etc., stacking serviceable material for measurements and disposal of unserviceable material as directed, within a lead of 50m – ordinary rock - pipes,cablesetc.exceeding 80mm dia but not exceeding 300 mm dia	80.00		metre	
50 13.50. 1	Applying priming coat - with ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and soft wood)	6.00		sqm	
51 13.50. 4	Applying priming coat - with ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (secondcoat)	17.00		sqm	
52 13.62. 1	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade - Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	22.00		sqm	
53 13.43. 1	Applying one coat of water thinnable cement primer of approved brand and manufacturer on wall surface - water thinnable cement primer	210.00		sqm	
54 13.60. 1A	Wall painting with plastic emulsion paint - Royal of approved brand and manufacture to give an even shade - two or more coats on new work	210.00		sqm	
	TOTAL				

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

Contractor

Executive Engineer