

PONDICHERRY UNIVERSITY
ENGINEERING WING

SCHEDULE OF WORK

Name of the work: Renovation to toilets at Pavendar Bharathidasan Gents hostel

S. No.	Description	Qty.	Rate Rs.P.	Unit	Amount Rs.P.
1 15.1 2.1	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	39.00		each	
2 15.2 3.1	Dismantling tile work in floors and roofslaid in cement mortar including stacking material within 50 metres lead – for thickness of tiles 10mm to 25mm	300.00		Sqm	
3 15.5 6	Dismantling old plaster or skirting rakingout joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead	75.00		Sqm	
4 15.4 2.2	Dismantling C.I. or asbestos rain waterpipe with fittings and clamps including stacking the material within 50 metres lead - 100 mm dia pipe	80.00		metre	
5 15.2. 2	Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	22.00		cum	
6 22.5	Providing and laying water proofing treatment in sunken portion of WCs , bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying :- a) First layer of slurry of cement @0.488 kg / sqm mixed with water proofing cement compound @ 0.253 kg / sqm . This layer will be allowed to air cure for 4 hours - b) second layer of slurry of cement @ 0.242 kg / sqm mixed with water proofing cement compound @ 0.126 kg /sqm . This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate included preparation of surface, tratment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry .	62.00		Sqm	
7 19.3 3.2	Providing and fixing on wall / column faceunplasticised - 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	20.00		metre	
8 19.3 3.1	Providing and fixing on wall / column faceunplasticed - PVC soil and waste pipes (type - B) conforming to IS : 13592- 1992 including jointing with seal	60.00		metre	

	ring conformation to IS : 5382 leaving 10mm gap for thermal expansion - single socked pipes -110mm diametre				
9 17.3 7.1	Providing and fixing M.S.holder - batclamps of approved design to sand cast iron / cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size), including cost of cutting holes and making good the walls etc. - for 100mm dia pipe	18.00		each	
10 19.3 3.1B	Providing and fixing on wall face / columnface unplasticised - PVC moulded fittings / accessories for unplasticisd - 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 without door - 110 x110x110mm	15.00		each	
11 19.3 3.2C	Providing and fixing on wall / column faceunplasticisd - PVC moulded fittings / accessories for unplasticisd - 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 75 mm	15.00		each	
12 19.3 3.1C	Providing and fixing on wall face / columnface unplasticised - PVC mould fittings / accessories for unplasticisd - 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 110 mm	15.00		each	
13 4.1.1 1A	Providing and laying in position cementconcrete of specified grade excluding the cost of centering and shuttering - all work upto plith level - 1:5:10 (1 cement : 5 coarse sand : 10 graded brick aggregate 40mm nominal size)	22.00		cum	
14 17.2. 2	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. flusing 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 black solid plastic seat and lid	3.00		each	
15 17.1. 1	Providing and fixing water closet squattingpan (Indian type W.C.pan) with 100 mm Sand Cast Iron P or S trap, 10 litre low level white P.V.C flusing cistren, including flush pipe , manually	6.00		each	

	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. White vitreous china Orissa pattern W.C.pan of size 580x440mm with integral type foot rests.				
16 17.2 3	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm or 340x410x265mm sizes respectively	9.00		each	
17 17.2 5.1	Providing and fixing white vitreous chinawash basin including making all connections but excluding the cost of fittings – flat back wash basin of size 630x450mm	9.00		each	
18 8.10. 2	Providing and fixing stone slab with tablerubbed , edges rounded and polished , of size 75x50 cm deep and 1.8cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6mm nominal size) and finished smooth - Granite stone of approved shade	9.00		sqm	
19 17.6 9.1	Providing and fixing PTMT waste couplingfor wash basin and sink, of approved quality and colour - waste coupling 31 mm dia of 79 mm length and 62 mm breadth weighing not less than 45 gms	18.00		each.	
20 18.5 4.1	Providing and fixing PTMT bib cock of approved quality and colour - 15mm nominal bore, 86 mm long , weighing not less than 88gms	18.00		each	
21 18.5 4.2	Providing and fixing PTMT bib cock of approved quality and colour - 15mm nominal bore, 122 mm long , weighing not less than 99 gms	18.00		each	
22 18.5 6.1	Providing and fixing PTMT pillar cock of approved quality and colour - 15 mm nominal bore , 107 mm long, weighing not less than 110 gms	9.00		each	
23 18.5 7.1	Providing and fixing PTMT , push cock of approved quality and colour - 15 mm nominal bore, 98 mm long, weighing not less than 75 gms	9.00		each	
24 18.6 3	Providing and fixing PTMT angle stop cock15 mm nominal bore, weighing not less than 85 gms	27.00		each	
25 18.7 4.2	Providing and fixing unplasticised P.V.C. connection pipe with PTMT nuts, collar, and bush of approved quality and colour - 15 mm nominal bore with 45cm length	36.00		each	
26 17.3	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of	6.00		each	

1	approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P.brass screws and washers complete				
27 18.6 4	Providing and fixing PTMT swivelling shower, 15mm nominal bore, weighing not less than 40 gms	9.00		each	
28 18.5 5.2	Providing and fixing PTMT stop cock of approved quality and colour - 20 mm nominal bore , 89mm long, weighing not less than 88 gms	27.00		each	
29 11.3 6C	Providing and fixing commercial qualityceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by themanufacturer) , of approved make (Jhonson /Asian / Somany / Nitco) in all colours ,shades of size 300 x 600 mm as approved in skirting , risers of steps and dados,over 12mm thick bed of cement mortar 1:3 (1cement : 3 coarse sand) and jointing withgrey cement slurry @ 3.3 kg per sqm,including pointing in white cement withpigment of matching shade complete – size300x600 mm	221.00		sqm	
30 11.3 8.1	Providing and laying ceramic glazed floor tiles of size 300 x 300 mm (thickness to be specified by the manufacturer) , of 1st quality conforming to IS :15622, of approved make (Nitco / Kajaria) 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	75.00		sqm	
31 18.9. 12	Providing and fixing ASTM pipes including all ASTM plain& brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and testing of joints complete (Internal work exposed on wall) - 25mm nominal outer dia pipes	20.00		metre	
32 18.9. 13	Providing and fixing ASTM pipes includingall ASTM plain& brass threaded fittings i/c fixing the pipe with clamps at 1.00m spacing . This includes jointing of pipes & fitting with one step ASTM solvent cement and testing of joints complete (Internal work exposed on wall) - 32mm nominal outer dia pipes	20.00		metre	
33 16.1 17	Supply and fixing of side hung window at all levels made out of un plasticised Poly vinyl chloride frame from approved make of natural colour with casement outer frame of size 56x48x30mm , shutter frame 66x56x30mm\ with wall	26.00		sqm	

	thickness of 1.8mm (+/-0.3mm) and 5mm thick , clear glass . The gasket should be made of EPDM (Ethylene propylene dimonomer) with double gasket sealing and applying silicone sealants outside and acrylic sealent inside. The sections should be reinforced with GI sheet of 1.5mm thick with suitable drainage grouting including all necessary hardware fittings etc., all complete as per architectural drawings and the engineer -in - charge.				
34 17.2 8.1.1	Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC waste fittings complete - semi rigid pipe - 32mm dia	18.00		each	
35 MR App rove d prev ious esti mate	Providing and fixing trap of self-cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors 100 mm inlet and 100mm outlet UPVC/PVC	30.00		each	
36 14.6 7.2	Finishing walls with premium acrylic smooth exterior paint with silicon additives of required shade - old work (one or more coats applied @0.83 ltr /10 sqm)	235.00		sqm	
37 13.4 7.1	Finishing walls with premium acrylic smooth exterior paint with silicone additives of required shade - New work (two or more coats applied @1.43 ltr / 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg / 10sqm)	75.00		sqm	
38 13.3. 1	20mm cement plaster of mix -1:4 (1 cement :4 fine sand)	75.00		sqm	
39 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 : 4fine sand)	10.00		sqm	
40 9.11 9	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 through out the frame . The door frame to be fixed to the wall using	90.00		metre	

	M.S.screws of 65 / 100 mm size, complete as per manufacturer's specification				
41 9.12 0.1	Providing and fixing factory made panel PVC door shutter consisting of frame made outof M.S.tubes of 19 gauge thickness and sizeof 19 mm x 19 mm for styles and 15 x15 mmfor top & bottom rails. M.S.frame shallhave a coat of steel primers of approvedmake and manufacture . M.S. frame coveredwith 5 mm thick heat moulded PVC 'C'channel of size 30mm thickness, 70 mm widthout of which 50 mm shall be flat and 20 mmshall be tapered in 45 degree angle on bothside forming styles and 5 mm thick, 95 mmwide PVC sheet out of which 75 mm shall beflat and 20 mm shall be tapered in 45degree on the inner side to form top andbottom rail and 115 mm wide PVC sheet outof which 75 mm shall be flat and 20 mmshall be tapered on both sides to form lockrail. Top , bottom and lock rails shall beprovided both side of the panel. 10mm (5 mmx 2) thick , 20 mm wide cross PVC sheet beprovided as gap insert for top rail &bottom rail , panelling of 5 mm thick bothside 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 & rawing - 30mm thick plain PVC door shutters	26.00		Sqm	
42 9.20. 2	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1)decorative type , core of block boardconstruction with frame of 1 st class hardwood and well matched teak 3 ply veneeringwith vertical grains or cross bands andface veneers on both faces of shutters – 30mm thick including ISI marked StainlessSteel butt hinges with necessary screws	6.00		Sqm	
43 9.1.3 V	Providing wood work in frames of doors , windows, clerestory windows and otherframes , wrought framed and fixed inposition with hold fast lugs or with dashfasteners of required dia & length	0.11		cum	

	(holdfast lugs or dash fastener shall be paidfor separately) - Kiln seasoned andchemically treated Vengai wood				
44 9.53	Providing 40 X 5 mm flat iron hold fast 40 cm long including fixing to frame with 10mm diameter bots, nuts and wooden plugs andembeddings in cement concrete block 30 x10x 15 cm 1:3:6 mix (1 cement : 3 coarse sand: 6 graded stone aggregate 20mm nominalsize)	18.00		Each	
45 9.10 0.3	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	36.00		Each	
46 9.97. 5	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 : - 100x10mm	36.00		Each	
47 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:-250x16mm	3.00		Each	
48 9.97. 3	Providing and fixing aluminium tower bolts , ISI marked , anodised (anodic coating notless than grade AC 10 as per IS :1868) ,transparent or dyed to required colour orshade , with necessary screws etc. complete- 200 x10 mm	6.00		Each	
49 9.10 0.1	Providing and fixing aluminium handles , ISI marked , anodised (anodic coating notless than grade AC 10 as per IS : 1868)transparent or dyed to required colour orshade,with necessary screws etc, complete -125 mm	6.00		Each	
50 13.6 2.1	Painting with synthetic enamel paint of approved brand and manufacture of requiredcolour to give an even shade - Two or morecoats on new work over an under coat ofsuitable shade with ordinary paint ofapproved brand and manufacture	16.00		Sqm	
	TOTAL				

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

Contractor

Executive Engineer(oc)