

NAIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI - 620015
DEPARTMENT OF ESTATE MAINTRNANCE
SCHDULE OF WORKS

N/W :Room provision for research scholar @ new faculty block & providing painting and pathway in Mechanical Engineering Department.

Name of the Agency :

SLNo	Description	Qty	Unit	Rate	Rate (In Words)	Amount(RS)
1	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.					
1.1	All kinds of soil	2.5	cum			
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
2.1	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	0.6	cum			
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).	0.6	cum			
4	Centering and shuttering including strutting, propping etc. and removal of form for :					
4.1	Lintels, beams, plinth beams, girders, bressumers and cantilevers	4	sqm			
5	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.					
5.1	Cold twisted bars	90	kilogram			

SLNo	Description	Qty	Unit	Rate	Rate (In Words)	Amount(RS)
6	Brick work with common burnt clay modular bricks of class designation 3.5 in foundation and plinth in:					
6.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	1.7	cum			
7	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).					
7.1	Second class teak wood	0.1	cum			
8	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B), including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, all complete as per directions of Engineer- in-charge and panelling with panels of :					
8.1	12 mm thick one side Pre-laminated particle board (decorative lamination on one side and other sides balancing lamination) grade - 1 medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT-1 conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS : 848 and pre-laminated conforming to IS : 12823, Grade -1, Type II marked :	2.5	sqm			
9	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.					
9.1	Second class teak wood					
9.1.1	35 mm thick	35	sqm			

SLNo	Description	Qty	Unit	Rate	Rate (In Words)	Amount(RS)
10	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.					
10.1	Fixed to steel windows by welding	0.8	kg			
11	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :					
12	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :					
12.1	250x10 mm	2	each			
12.2	150x10 mm	6	each			
13	Providing and fixing ISI marked oxidised M.S. door latches conforming to IS:5930 with screws etc. complete :					
13.1	250x20x6 mm	2	each			
14	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :					
14.1	100 mm	8	each			
15	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.					
15.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	350	kg			
16	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :					
16.1	4.0 mm thick glass panes	1.5	sqm			

SLNo	Description	Qty	Unit	Rate	Rate (In Words)	Amount(RS)
17	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.					
17.1	Size of Tile 600x600 mm	40	sqm			
18	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete.					
18.1	Size of Tile 600x600 mm	3.35	sqm			
19	12 mm cement plaster of mix :					
19.1	1:6 (1 cement: 6 fine sand)	230	sqm			
20	White washing with lime to give an even shade :					
20.1	Old work (one or more coats)	140	sqm			
21	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade :					
21.1	One or more coats on old work	290	sqm			
22	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade					
22.1	One or more coats on old work	40	sqm			
23	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.					
23.1	In cement mortar	16	cum			

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24	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.					
24.1	For thickness of tiles 10 mm to 25 mm	6	sqm			
25	Dismantling wooden boardings in lining of walls and partitions, excluding supporting members but including stacking within 50 metres lead :					
25.1	Thickness above 10 mm up to 25 mm	210	sqm			
26	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	16	cum			
27	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	95	sqm			
28	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 :					
28.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	1	each			
29	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					
29.1	Semi rigid pipe					
29.1.1	32 mm dia	1	each			
30	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc.					

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31	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc.					
31.1	20 mm dia nominal bore	10	metre			
31.2	25 mm dia nominal bore	10	metre			
32	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :					
	25 mm nominal bore	1	each			
33	Providing and fixing uplasticised PVC connection pipe with brass unions :					
33.1	45 cm length					
33.1.1	15 mm nominal bore	1	each			
34	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work :					
34.1	25 mm diameter pipe	10	metre			
35	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :					
35.1	25 mm nominal bore	1	each			
36	Providing and fixing PTMT bib cock of approved quality and colour.					
36.1	15mm nominal bore, 86 mm long, weighing not less than 88 gms	1	each			
37	Providing and fixing PTMT stop cock of approved quality and colour.					
37.1	15 mm nominal bore, 86 mm long, weighing not less than 88 gms	1	each			
38	Providing and fixing PTMT pillar cock of approved quality and colour .					
38.1	15 mm nominal bore, 107 mm long, weighing not less than 110 gms	1	each			

SLNo	Description	Qty	Unit	Rate	Rate (In Words)	Amount(RS)
39	Providing and fixing PTMT grating of approved quality and colour.					
39.1	Circular type					
39.1.1	100 mm nominal dia	1	each			
40	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	255	sqm			
41	Providing and laying up to floor five level reinforced cement concrete in kerbs, steps and the like, 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).	3.1	cum			
42	Brick work with common burnt clay modular bricks of class designation 3.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :	13	Cum			

Signature of Contractor

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Chief of Works