

BILL OF QUANTITY

Name of work: Additional work for extension of built up space of Engine lab for School of Energy Science and Engineering at Technology Complex.

Item No.	Description of items	Unit	Qty	Rate (₹)	Rate in words	Amount (₹)
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					
	All kinds of soil.	Cum	12.96			
2	Demolishing cement concrete manually/ by mechanical means including disposal of material within the campus as per direction of Engineer - in - charge.					
	(a) Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	Cum	0.18			
3	Centering and shuttering including strutting, propping etc. and removal of form for all heights :					
	(a) Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	8.64			
4	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 (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	Cum	2.30			
5	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :					

	(a) 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	Cum	1.50			
6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.	Kg	120.00			
7	Providing flat brick soling under floor with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar 1:6 (1cement : 6 coarse sand), with common burnt clay non modular bricks:	Sqm.	20.00			
8	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					
	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	0.75			
9	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.					
	Cement mortar 1:4 (1 cement :4 coarse sand)	Sqm	6.18			
10	15 mm cement plaster on the rough side of single or half brick wall of mix :					
	1:4 (1 cement: 4 fine sand)	Sqm	13.91			
11	Cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement.					
	20 mm cement plaster	Sqm	6.18			
12	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	785.00			

13	Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerincharge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm	19.00			
14	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :					
	(a) Ridges plain (500 - 600mm)	Rm	3.50			
15	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqm	6.60			
16	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	Sqn	45.32			

17	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.					
	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	Kg	80.00			
18	Finishing walls with water proofing cement paint of required shade :					
	New work (Two or more coats applied @ 3.84 kg/10 sqm)	Sqm	18.00			
19	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :					
	(a) Two or more coats on new work	Sqm	70.00			
	Total Amount =					
	Rebate if Any =					
	Total Amount after Rebate =					
	Rounded off =					

(RupeesOnly)