BILL OF QUANTITY FOR CONSTRUCTION OF GARRAGE (FOR C-TYPE QUARTER) AT NATIONAL INSTITUTE OF TECHNOLOGY- ROURKELA.

SI. No	Item Description.	Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
1	Excavation in all types of soils soft or hard, including soft or hard murrum, soft rock, black cotton soil as per specification including shoring, strutting, bailing, pumping out water, backfilling in pits, trenches or in Plinth as directed with selected excavated soil in 200mm thick layers, rate also to include removal of soling/metalling and stacking the excavated material watering, spreading, compacting ramming & backfilling and carting & spreading surplus earth within or outside the premises as directed. no extra will be payable on account of lead.	12	Cum			
2	Back filling around foundations and plinths to proper grade and level with selected excavated soil including watering and ramming in layers of 25 cm. thickness to 90% max dry density by manual/mechanical means in saturated condition, dressing etc. complete including transportation.	8	Cum			
3	Filling the foundation & plinth with approved quality good river sand including ramming after watering for compacting laying sand in layers not exceeding 20 cm including cost of material, lead, labour, royality, T&P, tax etc. to complete the work in all respect as per the direction of the Engineerin-charge.	9	Cum			

SI. No	Item Description.	Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
4	Providing and Laying of Plain Cement Concrete of proportion (1cement: 4 coarse sand: 8 graded metal 40mm down size) by volume in foundation & sub-floor using Crusher Broken Hard Black Granite Metal of size 40 mm down of approved quality including mixing by mechanical mixer, laying in position, compacting, curing etc. including cost of all materials,labour,lead.royality,T & P etc. complete in all respect as per the direction of the Engineerin-charge.	4	Cum			
5	Providing & constructing K.B. Brick masonary using Locally available K.B. bricks with tolerance +/-8% having crushing strength not less than 75Kg/sqcm in cement sand mortar (1cement: 6 coarse sand) by volume in foundation & plinth including cost of all materials, labour, testing charges of material, lead, royality, curing,pointing, T&P etc. complete in all respect as per the direction of Engineer in-charge	4.5	Cum			
6	Providing & laying DPC 25mm thick in cement concrete (1:2:4) using 12.5mm size nominal size aggregate cost includes all material,labour, tax,lead, tools plant, lead etc. complete in all respects.	3.5	Sqm			

SI. No	Item Description.	Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
7	Providing, mixing and placing in position and compacting Reinforced cement concrete of proporation (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm down size) in superstructure including vibrating compacting, curing, hacking the surface to receive plaster complete inclusive of all labour/materials and as directed by Engineer-in -charge but excluding the cost of providing of steel formwork/ shuttering and steel reinforcement .					
8	Providing and fixing rigid smooth centering and shuttering in superstructure made out of RCC shuttering ply confirming to I.S.: 4990-1998 or marine ply confirming to I.S710 including starting, proping laying of water proof paper or plastic sheet to the horizontal surface to make water tight shuttering and also removal of form work including the cost of all labour, materials. (Only the area in contact with concrete will be measured.).	0.6	Cum			
	,	6	Sqm.			

SI. No	ltem Description.	Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
9	Providing, straightening, bending, binding and placing in position high strength deformed bars for reinforced cement concrete work including distribution bars, stirrups, binders etc. including initial straightening, removal of loose rust (If necessary cutting to requisite length, hooking, bending and binding to correct shape placing in proper position and binding with 20 gauge black annealed wire at every intersection complete as per drawing and direction. Payment to be made on actual quantities of reinforcement used in the work as per drawing and direction, weight calculated as per standard tables with three places of decimal and no extra for wastage, unnecessary overlaps or rolling margin shall be paid for, weight of binding wire shall not be measured its cost being included in the rate of reinforcement.)	0.75	gntl			
10	Providing & constructing K.B. Brick masonary using Locally available K.B. bricks with tolerance +/- 8% having crushing strength not less than 75 Kg/sqcm in cement sand mortar (1 cement : 6 coarse sand) by volume in superstructure including cost of all materials, testing charges of material, labour, lead, royality, curing, pointing, scaffolding, T&P, tax etc. complete in all respect as per the direction of Engineerin-charge	6	Cum			

SI. No	Item Description.	Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
11	Cement concrete flooring with cement concrete (1:2:4) 40mm thick flooring finished with a floating coat of neat cement slurry, rounding off edges and strips and cost of glass strips edging and labour etc. complete.	15	Sqm.			
12	Cement Plaster Skirting with C.M. 1:3 finished with a floating coat of neat cement including rounding of junctions & curing complete. 18mm thick	2	Sqm			
13	Providing 15mm thick cement plaster in cement sand mortar in proporation (1cement:6 fine sand) by volume over Brick masonary surface after racking out of joints, roughening the concrete surface, filling porturated surface, fixing wiremesh in case of Concrete & Brick work joints such that half on each surace fixed by help of nails cost includes of all materials, labour,lead, royality, T & P, scafolding, curing, tax etc. complete in all respect as per the direction of Engineer /in -charge.	55	Sqm.			
14	Finishing walls with water proofing cement paint to give an even shade of required shade, New /old work (two or more coats over primer coat) to give an even shade over plastered wall cost includes all material, scaffolding charges, lead,tax,T&P, Labour, royality,curing etc., complete in all respect making good the damages as per the direction of the Engineerin-charge.	38	Sqm.			

SI. No	Item Description.	Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
15	Finishing walls with water proofing cement paint weather coat of required shade, New work (two or more coats over primer coat) to give an even shade over plastered wall cost includes all material, scaffolding charges, lead,tax,T&P, Labour, royality,curing etc., complete in all respect making good the damages as per the direction of the Engineerin-charge.	30	Sam	J		
16	Supplying & Fixing in position folded grilled shutter made of 35 x 35x 6mm angle, 19 x 5mm MS flat and 12mm square bar as per the detailed working drawings, painting with 1coat of metal primer & two coats of enamel paint complete with fabrication charge, all material, labour, tax, lead, tools plant, cutting holes in brick masonry (6" x 6" x 6"), frixing the grilled gate & filling with cement concrete (1: 2:4), making good the damages caused, complete in all respects as directed.	195	Kg.			
17	Supplying & Fixing tubular truss including cutting, hoisting, fixing in position , and applying a priming coat of steel primer with two coats of enamel paint , welded & bolted including special shaped washer etc. complete, Hot finished welded type tubes.	140	Kg.			

SI. No	ltem Description.	Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
18	Structural steel work riveted, bolted, welded in built up section trusses and framed work using angle, tee, flat etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer & enamel paint two coats of approved shade over it all complete.	60	Ka.			
19	Providing, Supplying & fixing M.S. grills made of M.S. flat of size 19/25 x 6 mm & 16mm ,12mm / 8mm square bar as per detailed drawing & design in windows or in other location as required, including painting 2 coats of synthetic enamel paint of approved shade & brand over 2 coats of zinc chromate / metal primer complete in all respects with all labour, material ,fabrication charge, lead, royality, tax etc. as per direction of Engineerin-charge.	18	Kg.			
20	Supplying & Fixing Tata shaktee colour coated trapezoidal profile corrugated (Blue colour) GC sheets 0.45mm thick including cost of all material, fastners of approved quality such as self drilling screws & EDPM washer (confirming to International standard DIN/ASTM/ AS etc. or by means of galvanised J hook & washer, nut, rubber washer, labour, all material etc. complete in all respects. (Lapping will not taken in to account for payment)	23	Sqm			

SI. No		Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
21	Providing & Fixing Ridge made of colour coated GC sheets (TATA Shaktee) 0.45mm thickness of required profile including fixing in position, all accessories etc. to complete the work in all respects.	1	Mtr			
22	Providing plain cement mortar bands in cement mortar 1:4(1 cement: 4 fine sand) raised band, 50mm x 50mm	6	Mtr			
23	Applying Dr Fixit Pidicreate URP two coats over plastered / masonary surface after mixed in the prporation (1 URP: 1.5 Cement) as per the manufacture's specification cost includes preparation of surface, scafolding, all material, labour, tax, lead, tools plant etc, complete in all respects.	4	Sqm			
24	Providing andfixing ISI marked steel top hung ventilators of standard rolled steel section joints mitred and welded with iron lugs embedded in cement concrete 1:3:6 blocks or with wooden plugs and screws or with rawl plugs and screws or with fixing clips or with nuts and bolts including providing and fixing 4mm thick glass panes with glazing clips and special metal putty complete including a priming coat of approved steel primer, enamel paint two coats, hinges and pivots including cost of metal beadings and other fittings except necessary hinges or pivots as required.	0.4	Sqm			
	Total for 1 no garage	0.4	Sqiii		Rs	
	<u> </u>		30	x Rs		
	Cost for 30 no garages		30	X I LO	l l	

SI.	No	Item Description.	Qnty.	Unit.	Rate. In Figures	Rate in words	Amount
		N.B- If there is descripancy between	ds will govern.				
		If there is descripancy between amou	e, the real figure will govern o	ver the amount.			