

BILL OF QUANTITY

FOR CONSTRUCTION OF WASHING AREA AT CAMPUS OF CENTRAL UNIVERSITY OF JHARKHAND, BRAMBE, RANCHI.

Sl. No.	Item No.	Item	Quantity	Unit	Rate	Amount
1.	DSR-2012 2.8.1	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 up to 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.	4.75	M3		
2.	DSR-2012 2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	3.17	M3		
3.	DSR-2012 2.27	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	6.44	M3		
4.	DSR-2012 4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	1.82	M3		
5.	DSR-2012 4.1.8	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: 8 graded stone aggregate 40 mm nominal size).	0.86	M3		
6.	DSR-2012 4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	4.32	M2		
7.	DSR-2012 5.3	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).	0.57	M3		
8.	DSR-2012 5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilevers.	5.79	M2		
9.	DSR-2012 5.22.6	Reinforcement for R.C.C. works including straightening, cutting, bending, placing in position and binding all complete. Thermo-Mechanically Treated bars. (TMT)	76.13	Kg		

10.	DSR-2012 6.1.2	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	4.05	M3		
11.	DSR-2012 6.13.2	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)	25.65	M2		
12.	DSR-2012 10.26.1	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a Priming coat of approved steel primer. M.S. tube. 50mm	353.70	Kg		
13.	DSR-2012 12.50	Providing & fixing of pre-coated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm +/- 5% total coated thickness (TCT) thick Zinc coating 120gsm as per IS: 277 in 240mpa 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 while transportation and should be supplied in single length up to 12 meter or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete up to 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.	22.50	M2		
14.	DSR-2012 13.1.2	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	51.30	M2		
15.	DSR-2012 13.9.2	Cement plaster 1:3 (1 cement: 3coarse sand) finished with a floating coat of neat cement. 20 mm cement plaster	18.23	M2		
16.	DSR-2012 13.44.1	Finishing walls with water proofing cement paint of required shade: New work (Two or more coats applied @ 3.84 kg/10 sqm).	51.30	M2		
17.	DSR-2012 13.56.1	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour over a priming coat of approved steel primer on new work. 100 mm diameter pipes	51.00	M		
18.	DSR-2012	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80o C including all special fittings of composite material				

	18.1.1 18.1.3	(engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge. Internal work – Exposed on wall 1216 (16 mm OD) pipe 2025 (25 mm OD) pipe	10.00 40.00	M M		
19.	DSR-2012 18.49.1	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 15 mm nominal bore.	02	Each		
20.	DSR-2012 19.6.2	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : 150 mm dia. R.C.C. pipe	20.00	M		
21.	DSR-2012 19.7.1.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	01	Each		
		TOTAL:--				

BILL OF QUANTITY
FOR CONSTRUCTION OF KITCHEN AT CAMPUS OF CENTRAL UNIVERSITY OF JHARKHAND,
BRAMBE, RANCHI.

Sl. No.	Item No.	Item	Quantity	Unit	Rate	Amount
1.	DSR-2012 2.8.1	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 up to 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.	7.76	M3		
2.	DSR-2012 2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	5.17	M3		
3.	DSR-2012 2.27	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	15.75	M3		
4.	DSR-2012 4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	4.06	M3		
5.	DSR-2012 4.1.8	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: 8 graded stone aggregate 40 mm nominal size).	1.41	M3		
6.	DSR-2012 4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	6.40	M2		
7.	DSR-2012 5.3	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).	2.45	M3		
8.	DSR-2012 5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilevers.	29.25	M2		
9.	DSR-2012 5.22.6	Reinforcement for R.C.C. works including straightening, cutting, bending, placing in position and binding all	306.83	Kg		

		complete. Thermo-Mechanically Treated bars. (TMT)				
10.	DSR-2012 6.1.2	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	8.07	M3		
11.	DSR-2012 6.4.2	Brick work 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 in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	17.10	M3		
12.	DSR-2012 8.2.2.2	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade Area of slab over 0.50 sqm.	13.72	M2		
13.	DSR-2012 10.5.2	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm 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 flats 30x6mm for diagonal braces and central cross piece.	3.78	M2		
14.	DSR-2012 10.13.1	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer. Fixing with 15x3 mm lugs 10 cm. long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	231.00	Kg		
15.	DSR-2012 10.26.1	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a Priming coat of approved steel primer. M.S. tube. 50mm	336.00	Kg		
16.	DSR-2012 10.30.1	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows all complete. With 4.0 mm thick glass panes.	8.55	M2		
17.	DSR-2012 11.26.1	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab	40.65	M2		

		including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : 25 mm thick.				
18.	DSR-2012 11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	34.87	M2		
19.	DSR-2012 12.50	Providing & fixing of pre-coated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm +/- 5% total coated thickness (TCT) thick Zinc coating 120gsm as per IS: 277 in 240mpa 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 while transportation and should be supplied in single length up to 12 meter or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete up to 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.	46.20	M2		
20.	DSR-2012 13.1.2	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand) Deduction:-- Door: 2X0.90X2.10 = 3.78M2 Ventilator:2X12X0.30X0.60=4.32M2 Total = 8.10M2	111.22	M2		
21.	DSR-2012 13.44.1	Finishing walls with water proofing cement paint of required shade: New work (Two or more coats applied @ 3.84 kg/10 sqm).	111.22	M2		
22.	DSR-2012 13.61.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work.	7.56	M2		
23.	DSR-2012	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot &				

	18.1.1 18.1.3	cold water supply, capable to withstand temperature up to 80o C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge. Internal work – Exposed on wall 1216 (16 mm OD) pipe 2025 (25 mm OD) pipe	10.00 40.00	M M		
24.	DSR-2012 18.49.1	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 15 mm nominal bore.	02	Each		
25.	DSR-2012 19.6.2	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : 150 mm dia. R.C.C. pipe	20.00	M		
26.	DSR-2012 19.7.1.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	01	Each		
		TOTAL:--				

BILL OF QUANTITY
FOR CONSTRUCTION OF GAS CYLINDER STORE AT CAMPUS OF CENTRAL UNIVERSITY OF
JHARKHAND, BRAMBE, RANCHI.

Sl. No.	Item No.	Item	Quantity	Unit	Rate	Amount
1.	DSR-2012 2.8.1	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 up to 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.	2.72	M3		
2.	DSR-2012 2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	1.81	M3		
3.	DSR-2012 2.27	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	2.83	M3		
4.	DSR-2012 4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	0.69	M3		
5.	DSR-2012 4.1.8	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: 8 graded stone aggregate 40 mm nominal size).	0.49	M3		
6.	DSR-2012 4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	2.75	M2		
7.	DSR-2012 5.3	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).	0.21	M3		

8.	DSR-2012 5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilevers.	3.28	M2		
9.	DSR-2012 5.22.6	Reinforcement for R.C.C. works including straightening, cutting, bending, placing in position and binding all complete. Thermo-Mechanically Treated bars. (TMT)	32.67	Kg		
10.	DSR-2012 6.1.2	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	2.47	M3		
11.	DSR-2012 6.13.2	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) Deduction :-- Door :--1X0.90 X 2.10 = 1.89M2 Ventilator:-- <u>12X0.30X0.60 = 2.16M2</u> Total :-- = 4.05M2	26.20	M2		
12.	DSR-2012 10.5.2	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm 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 flats 30x6mm for diagonal braces and central cross piece.	1.89	M2		
13.	DSR-2012 10.25.2	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.	4.32	Kg		
14.	DSR-2012 10.26.1	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a Priming coat of approved steel primer. M.S. tube. 50mm	27.88	Kg		
15.	DSR-2012 12.50	Providing & fixing of precoated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm +/- 5% total coated thickness (TCT) thick Zinc coating 120gsm as per IS: 277 in 240mpa 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 while transportation	8.66	M2		

		and should be supplied in single length up to 12 meter or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete up to 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.				
16.	DSR-2012 13.1.2	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand) Deduction:-- Door: 2X0.90X2.10 = 3.78M2 <u>Ventilator:2X12X0.30X0.60=4.32M2</u> Total = 8.10M2	65.09	M2		
17.	DSR-2012 13.44.1	Finishing walls with water proofing cement paint of required shade: New work (Two or more coats applied @ 3.84 kg/10 sqm).	65.09	M2		
18.	DSR-2012 13.61.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work.	5.94	M2		
		TOTAL:--				

A. CONSTRUCTION OF WASHING AREA :-
B. CONSTRUCTION OF KITCHEN :-
C. CONSTRUCTION OF GAS CYLINDER STORE :-
Total Amount :-

TOTAL: (in figure) RS. _____

Total (inword) _____

**NAME OF CONTRACTOR
(ALONG WITH DATE & SEAL)**