

College of Language and Culture Studies

Construction of 4 Units of 4 Blocks each Staff Residences

Bill of Quantity (BoQ) - Civil Works

Sl. No.	Item Description	Unit	Quantity	Rate (Nu.)	Amount (Nu.)
1.0	CLEARING & GRUBBING				
1.1	Clearing jungle including uprooting of vegetation & trees of girth < 300mm & disposal within 50m of the site	sq.m	371		
2.0	EARTH WORKS				
2.1	Excavation in foundation trenches or drains, width <1.5m, area <10Sq.M. in plan, depth >300mm including dewatering dressing and ramming, disposal of surplus soil within 50m lead & 1.5m lift.	cum	350.64		
2.2	Filling of trenches, sides of foundations etc. in layers<200mm using selected excavated earth, ramming etc. within lead 50 m & lift 1.5m	cum	140.26		
2.3	Extra for every additional lead of 250m beyond 50m up to 1000m and deposit to a level up to 1.5m	cum	140.26		
3.0	DAMP PROOF COURSE				
3.1	Providing and laying moisture barrier using plastic sheeting underlay 100 micro-metre	sq.m	235.46		
3.2	Providing & laying dry earth bedding, including consolidating each deposited layer by watering, ramming and dressing (For Ground Floor)	cum	23.38		
4.0	STONE WORKS				
4.1	Providing and laying Hand packed stone filling or soling with stones	cum	48.55		
4.2	Providing & laying Random Rubble Masonry with hard stone in foundation & plinth -In cement mortar 1:6	cum	31.84		
5.0	PLAIN CEMENT CONCRETE				
5.1	Providing and laying in position plain cement concrete 1:2:4 (1 cement : 2 sand : 4 graded crushed stone 20 mm nominal size) excluding the cost of centering and shuttering - All work upto plinth level under footings - 100mm thick.	cum	6.62		

5.2	Providing and laying in position plain cement concrete 1:3:6 (1 cement : 3 sand : 6 graded crushed stone 20 mm nominal size) excluding the cost of centering and shuttering - All work upto plinth level under RRM wall-75mm thick.	cum	4.52		
5.3	Providing and laying in position plain cement concrete 1:3:6 (1 cement : 3 sand : 6 graded crushed stone 20 mm nominal size) excluding the cost of centering and shuttering - All work upto plinth level under RRM wall-50mm thick.	cum	1.92		
5.4	Providing and laying in position plain cement concrete 1:2:4 (1 cement : 2 sand : 4 graded crushed stone 20 mm nominal size) excluding the cost of centering and shuttering - All work upto plinth Level. GROUND FLOOR	cum	23.38		
6.0	BRICK WORK				
6.1	Providing & laying Concrete block brick (240mm x 115mm x 80mm) in superstructure in cement mortar 1:3- External wall	cum	127.19		
6.2	Providing & laying Concrete Solid Block Masonry (115 mm) in superstructure below floor 2 level. In cement mortar 1:3. Concrete Solid Brick (240mm x 115mm x 80mm) Internal wall	sq.m	463.19		
7.0	REINFORCED CEMENT CONCRETE WORKS				
7.1	Providing & laying in position reinforced cement concrete excluding the cost of centering, shuttering and reinforcement - all work upto plinth level 1:1:2 (1 cement : 1 sand : 2 graded crushed rock 20 mm nominal size) - Footing	cum	23.17		
7.2	Providing & laying in position reinforced cement concrete work in plinth and skirting courses, fillets, columns , pillars, posts and struts upto floor five level excluding the cost of centering, shuttering and reinforcement. 1:1:2 (1 cement : 1 sand : 2 graded crushed rock 20 mm nominal size)	cum	15.24		
7.3	Providing & laying in position reinforced cement concrete work in beams, lintels, bands, plain window sills, staircases, spiral staircases upto floor five level excluding the cost of centering, shuttering and reinforcement 1:1:2 (1 cement : 1 sand : 2 graded crushed rock 20 mm nominal size)	cum	58.61		

7.4	Providing & laying in position reinforced cement concrete work in suspended floor, roofs having slope upto 15 degree, landings, balconies, shelves and chajjas upto floor five level excluding the cost of centering, shuttering and reinforcement 1:1:2 (1 cement : 1 sand : 2 graded crushed rock 20 mm nominal size)	cu.m	61.14		
7.5	Providing & making Bhutan type traditional cornices in R.C.C 1:1.5:3, 20mm aggregate including the cost of formwork & finishing with 6mm thick plaster on the exposed surface with cement mortar 1:3 including reinforcement and formwork as per standard design <i>(Measurement to be taken along the cornice and wall junction);</i>	m	73.81		
8.0	FORMWORKS				
8.1	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork-Foundation and plinth etc.	sq.m	43.96		
8.2	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork Columns, pillars, post, struts etc. No Mobil oil shall be used in formwork.	sq.m	200.49		
8.3	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork Lintels, beams, girders, bressumers, cantilevers etc. No Mobil oil shall be used in formwork.	sq.m	431.91		
8.4	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork Suspended floor, roof, landing, shelves and their supports, balconies, chajjas, etc.. No Mobil oil shall be used in formwork.	sq.m	459.89		
9.0	STEEL REINFORCEMENT WORKS				
9.1	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	kg	27912.56		
10.0	FLOORING & SKIRTING				
10.1	Providing & fixing white or colored 300x300mm Anti-skid tiles in flooring including skirting laid on bed of 12mm thick cement mortar 1:3 finished with white cement in joints with necessary rubbing & polishing complete	sq.m	369.59		

10.2	Pal cement concrete flooring 1:2:4, finished with floating coat of neat cement. Kitchen slab -20mm aggregates, 40mm thick	sq.m	12.12		
10.3	Providing & laying Kota stone flooring over 20mm thick base of cement mortar 1:4, jointed with grey cement slurry mixed with pigment where necessary, rubbing & polishing complete including skirting and nosing in step thread for staircase	sq.m	49.24		
10.4	Providing & fixing white/ coloured glazed tiles in flooring, treads of steps and landings laid on bed of 12mm thick cement mortar 1:3 finished with flush pointing in white cement: - size 150x150mm - Toilet wall	sq.m	81.12		
10.5	Providing & fixing white/coloured glazed 300x300mm Anti-skid tiles in flooring, treads of steps and landings laid on bed of 12mm thick cement mortar 1:3 finished with flush pointing in white cement including skirting: Toilet & kitchen floor	sq.m	60.41		
11.0	WOOD WORKS				
11.1	Providing & fixing in position dressed wood work in frames of doors, windows, clerestory windows and other frames, wrought and framed.	cum	4.53		
11.2	Providing & fixing flush door shutters 40mm thick (pre-fabricated), block-board core with teak ply veneer including all fittings and accessories (Hafele brand or equivalent) as per specifications and details provided in the drawings/by Project Engineer.	sq.m			
	Door panel 40mm thick flush door		28.81		
11.3	Providing & fixing railing with 90x60mm top & bottom rails, trellis 60x45mm including 2 coats of paint etc. all complete. 900 mm high, Mixed Conifer	m	29.35		
11.4	Providing & fixing 100x12mm, with 25mm dia wooden curtain rod and brackets including fixing 25x3x100 and plugs etc. complete... Mixed conifer	m	91.74		
12.0	ALUMINIUM WINDOW FRAME WORKS				

12.1	Providing & fixing anodised Aluminium section for doors, windows, ventilators, partitions framing, false ceiling framing of specified sections including all accessories such as U-rubber gasket for fixing glass panes, weather strips or weather seals, roller, springs, etc complete (excluding the cost of glass panes or boards in case of partitions/doors/windows and ceiling boards in case of ceiling). Sliding, open able and pivoted windows	sets			
	W4R with all accessories complete		4		
	W2 with all accessories complete		4		
	W3 with all accessories complete		4		
	W3b with all accessories complete		4		
	W4 with all accessories complete		4		
	AP with all accessories complete		4		
	AP2 with all accessories complete		1		
	V1 with all accessories complete		9		
	V with all accessories complete		4		
13.0	PLASTERING WORKS				
13.1	Providing & laying 6mm cement plaster (in ceilings) C.M 1:4	sq.m	466.35		
13.2	Providing & laying 20mm cement plaster on rough side of single or half-brick wall C.M 1:4 Internal wall	sq.m	1484.37		
13.3	Providing & laying 20mm cement plaster on rough side of double or full-brick wall C.M 1:4 (External wall)	sq.m	391.1		
14.0	ROOFING				
14.1	Providing & fixing roof framing, in trusses, purlins, rafters, posts, post plates with nuts and bolts and other accessories including hoisting, fixing complete. Mixed Conifers	cu.m	8.13		
14.2	Providing & fixing Pre Painted Steel Corrugated Roofing sheets, including bolts, hooks and nuts 8mm dia. with bitumen and G.I limpet washers filled with white lead for connection, excluding the cost of purlins, rafter and trusses.	sq.m	490.09		
14.3	Providing & fixing 600mm ridges or hips in plain G.I. including bolts, hooks and nuts 8mm dia G.I limpet and bitumen washers for connection	m	28.3		
14.4	Provide & fixing 450mm over all semi-circular plain PVC gutter, including brackets, bolts, nuts, washers & rain water pipes connections excluding the cost of pipes - 24g sheet	m	56.6		

14.5	Providing and fixing on wall face single socketed rigid PVC (Working Pressure 4kgf per sq.cm) rain water drop down pipes including jointing with seal ring leaving 10 mm gap for thermal expansion, clamps etc- complete 110mmdia	m	24		
14.6	Providing and fixing on wall face PVC coupler for rigid rain water pipes including jointing with seal ring leaving 10 mm gap for thermal expansion - complete -110 mm	nos	2		
14.7	Providing and fixing on wall face PVC Single tee with door for rigid rain water pipes including jointing with seal ring leaving 10 mm gap for thermal expansion - complete 110mm	nos	2		
14.8	Providing and fixing on wall face PVC bend for rigid rain water pipes including jointing with seal ring leaving 10mm gap for thermal expansion - complete with 110mm thick	nos	5		
14.9	Providing and fixing on wall face PVC shoe for rigid rain water pipes including jointing with seal ring leaving 10mm gap for thermal expansion - complete 110 mm	nos	5		
14.10	Providing & fixing Eaves board (225x25mm) with moulding fitted and fixed with necessary screws. Mixed conifer	m	100.8		
15.0	PAINTING WORKS				
15.1	Providing and applying one coat of primers wood work - pink primer	sq.m	280.01		
15.2	Providing & applying two coats of synthetic enamel paint of approved colour and texture by the client on eve board & pelmets	sq.m	192.54		
15.3	Providing and applying wood preservatives Brown two coat 2 on new work	sq.m	280.01		
15.4	Providing and applying , two or more coats of venyle plastic emulsion paint including finishing complete for intenal wall	sq.m	1484.37		
15.5	Providing and applying , two or more coats of venyle plastic emulsion paint including finishing complete for External wall	sq.m	391.1		
15.6	Providing and applying one Coat of Cement Primer on both external and internal wall.	sq.m	1875.47		
15.7	Providing, preparing and applying Sumdang Traditional Bhutanese paintings (Washable) - Rab	sq.m	49.96		
16.0	PLUMBING				

16.1	Providing & fixing white vit. China angle back wash basin 400x400mm including brackets, 15mm CP brass pillar taps, cp chain & rubber plug, 32mm cp/PVC waste/coupling, 32mm dia. cp brass trap, union, repair walls, all its accessories complete (approved brand/Sample to be pproved by client/site engineer)	each	8		
16.2	Providing & fixing European-type vitreous china w.c pedestal including seat and lid with c.p brass hinges, 15 lit white vitreous china low level cistern, fittings, brackets, repair walls. white, with plastic seat & lid.	each	4		
16.3	Providing & fixing Indian - type vitreous china WC squatting pan, including 100mm HCIP or S trap, 10l low level vitreous china cistern & fittings and repair of walls, etc. complete - 580mm white (SQCA approved brand/Sample to be approved by client/site engineer)	each	4		
16.4	Providing & fixing cp brass stop cock-15mm angle cp knob (approved brand/Sample to be approved by Project Engineer) for all wash basin.	each	12		
16.5	Providing & fixing Kitchen Sinks including all connections and fittings with complete accessories Stainless steel, 1080 x 520 x 175 mm, single bowl & drainboard	each	4		
16.6	Providing & fixing c.p brass shower fittings complete with brass mixer - Shower with revolving joint, 15mm (approved brand/sample to be approved by Project Engineer)	each	4		
16.7	Providing & fixing 600x450mm bevelled edge mirror (superior glass) incl.4mm A.C sheet base fixed to wooden cleats. (approved brand/ sample to be approved by Project Engineer)	each	8		
16.8	Providing & fixing Electric water heater including necessary fittings-25 litres fittings, (approved brand/sample to be approved by Project Engineer)	each	4		
16.9	Providing & fixing Electric water heater including necessary fittings-10 litres fittings, (approved brand/sample to be approved by Project Engineer)	each	4		
16.10	Providing & fixing cp brass mixer, for sink, with casted spout swinging 15mm. (approved brand/sample to be approved by Project Engineer)	each	8		
16.11	Provide and fixing SS Floor trap cover: complete for all floor traps. (approved brand/sample to be approved by Project Engineer)	each	8		

16.12	Providing & fixing toilet paper holder C.P. brass (approved brand/sample to be approved by Project Engineer)	each	8		
16.13	Providing & fixing soap dish. including brackets, wooden cleats, c.p. brass screws complete fittings. (approved brand/sample to be approved by Project Engineer)	each	12		
16.14	Providing & fixing H.D.P.E, soil waste pipe, 160mm dia, including all fittings (junctions, Tee, elbow, bends, Ys etc.) complete	m	18		
16.15	Providing & fixing PVC soil waste pipe, 110mm dia including all fittings (junctions, Tee, elbow, Ys, reducers, coupler, door bends, etc.) single or double socketed, including pipe clips complete	m	60		
16.16	Providing & fixing PVC soil waste pipe, 75mm dia including all fittings (junctions, Tee, elbow, Ys, reducers, couplers, door bends, etc.) single or double socketed, including pipe clips complete	m	75		
16.17	Providing & fixing CPVC water pipes (incoming) including fittings & clamps, Ts. Elbows, couplers, reducers, etc. and repair walls complete, 25mm	m	50		
16.18	Providing & fixing CPVC pipes (distribution) including fittings & clamps, Ts, Elbows, couplers, reducers, etc. and repair walls complete,				
	20mm	m	60		
	15mm	m	60		
16.19	Constructing Septic Tanks, in 2nd class brick masonry in cement mortar 1:4, including fittings, C.I cover with frame, 40mm thick concrete flooring (40mm aggregates) cement plaster concrete base in C.C 1:4:8 etc. complete as per standard design for 25 users	each	1		
16.20	C.I. manhole cover with frame (light duty) internal dimension 455 x 610mm Total weight of Cover and frame not less than 38 kg. (Cover 23 kg. and frame 15 kg.)	each	3		
16.21	Constructing Soak Pit of Size 2500mm Ø x3000mm depth including 450x450mm dry brick honeycomb shaft and 100mm S.W drain x 1800mm long	each	1		
16.22	P/F HDPE Water Tank (Sintex or equivalent) 2000 Liter with inlet, outlet and balance tank connections complete -Reservior Tank	each	2		
16.23	Fixing and installation of water Pump including fittings. Approved brand	each	1		

17.0	PLINTH PROTECTION				
17.1	Providing and laying Hand packed stone filling or soling with stones - plinth protection	cu.m	37.99		
17.2	Providing and laying in position plain cement concrete excluding the cost of centering and shuttering - All work upto plinth level. 1:2:4 (1 cement : 2 sand : 4 graded crushed rock 20mm nominal size)- plinth protection	cu.m	25.32		
17.3	Constructing random rubble masonry open surface drain in cement mortar 1:6 including earth work in excavation, 100mm thick concrete base 1:5:10, 40 mm aggregate 25mm thick cement concrete 1:2:4, 12mm aggregate for filling haunches, including 20mm cement plaster with a floating coat of neat cement, disposal of surplus earth- 250 x 300mm depth	m	84.4		
17.4	Earth work in excavation over areas, depth >300mm, width >1.5m, area >10sq.m on plan, including disposal of excavated earth within 50m lead and 1.5m lift & disposed soil to be neatly dressed - ordinary soil	cu.m	1548		
17.5	Extra for every additional lead of 25m beyond 50m up to 250m and deposit to a level up to 1.5m- all kinds of soil	cu.m	464.4		
	Total For One Building				
	Total for Four Building				