

Name of the Work: Construction of Food Science Laboratory					
Sub Head : Civil BoQ					
Sl. No.	Item Description	Quantity	Unit	Rate (Nu.)	Amount (Nu.)
	Clearing				
1	Clearing grasses including removal of rubbish within 50m of site	480.00	sq.m		
	Earthwork				
2	Excavation in foundation trenches or drains, width <1.5m, area <10 sq.m in plan, including dressing & ramming, disposal of surplus soil within 50m lead & 1.5m lift - hard Soil	106.97	cu.m		
	Earth work in excavation over areas, depth >300mm, width >1.5m, area >10 Sq.m on plan, including disposal of excavated earth within 50m lead and 1.5m lift & disposed soil to be neatly dressed	651.24	cu.m		
3	All kinds of soil				
	Extra for every additional lead of 250m beyond 50m up to 1000m and deposit to a level up to 1.5m				
4	All Kinds of Soil	592.06	cu.m		
5	Filling of trenches, sides of foundations etc. in layers <200mm using selected excavated earth, ramming etc. within lead 50 m & lift	59.18	cu.m		
6	Providing & laying dry earth bedding, including consolidating each deposited layer by watering, ramming and dressing	64.97	cu.m		
	Plain Cement Concrete				
	Providing and laying in position plain cement concrete excluding the cost of centering and shuttering - All work upto plinth level.				
7	1:2:4 (1 cement : 2 sand : 4 graded crushed rock 20 mm nominal size)	21.66	cu.m		
8	1:3:6 (1 cement : 3 sand : 6 graded crushed rock 20 mm nominal size)	9.49	cu.m		
	Reinforced Concrete				

9	Providing & laying in position reinforced cement concrete 1:1.5:3 (1 cement : 1.5 sand : 3 graded crushed rock 20 mm nominal size) excluding the cost of centering, shuttering and reinforcement - all work upto plinth level	12.44	<i>cu.m</i>		
10	Providing & laying in position RCC work 1:1.5:3 (1 cement : 1.5 sand : 3 graded crushed rock 20 mm nominal size) in columns upto floor five level excl. the cost of centering, shuttering and reinforcement.	13.97	<i>cu.m</i>		
11	Providing & laying in position RCC work 1:1.5:3 (1 cement : 1.5 sand : 3 graded crushed rock 20 mm nominal size) in beam & staircase upto floor five level excl. the cost of centering, shuttering and reinforcement.	40.28	<i>cu.m</i>		
	Bhutan Type Traditional cornices & Drazhu in RCC 1:1.5:3, 20mm agg including cost of formwork including finishing with 6mm plaster on the exposed surface with cement mortar 1:3, excluding reinforcement and decorative painting cost as per standard design.(measurement to be taken along the				
12	Lintel Cornices (only cornices portion at external face)	40.00	<i>m</i>		
	Steel Reinforcement				
13	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-10mm dia	9456.54	<i>kg</i>		
14	Providing and fixing plain glass panes on aluminium section complete including the cost of aluminium frame & accessories, 5.5mm thick, plain glass	22.38	<i>sq.m</i>		
	Formwork				
15	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - Foundation and plinth etc.	58.02	<i>sq.m</i>		

16	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - beams	402.49	<i>sq.m</i>		
17	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - columns above plinth	159.60	<i>sq.m</i>		
	Brick work				
18	Providing & laying Second-Class Brick work in Foundation & Plinth	65.43	<i>cu.m</i>		
19	Providing & laying Second-Class Half-brick Masonry (125 mm) in superstructure below floor 2 level	110.28	<i>sq.m</i>		
	Stone Masonry				
20	Providing & laying Random Rubble Masonry with hard stone in foundation & plinth - In cement mortar 1:5	44.49	<i>cu.m</i>		
21	Providing & laying Hand packed stone filling or soling with stones	63.05	<i>cu.m</i>		
	Wood Works				
22	Providing & fixing in position soffit/under roof ceiling (4mm thick Everest cement Board or equivalent) to 25x25*5mm M.S angle frame with necessary fixtures complete as per drawing and specification. The cost is inclusive of ms frame & applying priming coat of synthetic enamel.	355.27	<i>sq.m</i>		
	Providing & fixing Eaves board (225x25mm) with moulding fitted and fixed with necessary screws				
23	Wood works	91.40	<i>m</i>		
24	Providing & fixing 12mm thick 150mm wide pelmet with 25mm dia wooden curtain rod and brackets including fixing 25x3mm MS flats 10cm long and plugs etc. complete... local hard wood/mc	27.75	<i>m</i>		
	Components works				

	Providing and Fixing Following Windows Types complete as per drawing & specification, including pre-cast RCC sill and Providing, fixing and installation of 2-track, UPVC sliding windows including wire mesh, 88mm wide, 5mm clear glass with hardware fittings - EPDM gaskets, U- groove roller, Aluminium track, Fastner nut, interlock, touch lock and wool pile, complete.necessary shutter fittings like hinges, bolt,handle, hook & eye, etc. (Polished window). The cost of Lintel cornices & necessary paintings will be paid				
25	Window W1	9.00	each		
26	Window W2	2.00	each		
27	Window W3	2.00	each		
28	Window V	2.00	each		
29	Window uPVC	14.00	each		
	Door Components				
	Providing, Making and Fixing Following Door Types complete as per drawing & specification including shutter & S.S shutter fittings (100mm hinges-4 nos, 250mm Tower bolt-1 No,150mm handle-1 no, 250mm Slyding door bolt-1 no). Excluding the cost RCC Lintel cornices & paintings.				
30	Door D	1.00	each		
31	Door D1	1.00	each		
32	Door D1	5.00	each		
33	Door D2	1.00	each		
34	Door D3	2.00	each		
35	Steel work welded, in built up sections, trusses, frame-works including cutting, hoisting, fixing and appl. priming coat of red lead paint - In Tubular sections	2758.47	kg		
36	Steel work welded, in built up sections, trusses, frame-works including cutting, hoisting, fixing and appl. priming coat of red lead paint - In Tees, angles, flats and channels	155.53	kg		
37	Providing & fixing M.S. round hold-down bolts with nuts and washer plates, 16mm dia 400mm long	55.62	kg		

38	Providing, making and fixing M.S. straps, flats, sole plates etc.	146.20	<i>kg</i>		
	Flooring				
39	Providing & laying 45mm thick terrazzo - marble chips flooring top layer 10mm thick coloured marble chips of nominal size 1.5 to 3mm in proportion 1:2 (cement:chips), laid on 30mm thick concrete base in cement concrete 1:2:4, 12.5mm aggregate (chips ratio white chips 65% and black 30% in grey cement), including skirting - sample to be approved by client/Site engineer- in Grey Cement	211.31	<i>sq.m</i>		
40	Providing & fixing glass strips in joints of terrazo floors	368.00	<i>m</i>		
41	Providing & fixing white or colored 300x300mm Anti-skid tiles in flooring laid on bed of 12mm thick cement mortar 1:3 finished with white cement in joints with necessary rubbing & polishing complete	5.46	<i>sq.m</i>		
42	Providing & fixing white/colored glazed tiles in wall skirting laid on cement mortar 1:3 finished with flush pointing in white cement including rounding off junctions complete - size 150x150mm	33.53	<i>sq.m</i>		
43	Providing and laying Pre-Polished/ Polished Granite of approved quality and source in flooring using necessary cement bedding in C.M. 1:4 upto 20 mm thick average cement slurry for fixing the tiles with required slopes, curing, cleaning, filling the joints with pigments of similar colour and at all levels with all leads and lifts etc. complete as per directions of site in-charge and as per pattern required : 18mm Thick granite stone flooring over 18mm thick base of cement mortar 1:4.	17.01	<i>sq.m</i>		
	Roofing works				

44	P&F Prepainted/colour coated sheet metal roofing including bolts, hooks and nuts 8mm dia with bitumen and GI limpet washers filled with white lead for connection, excluding the cost of purlins, rafter and trusses - 0.5mm CRIL or equivalent	395.50	<i>sq.m</i>		
45	Providing and fixing colour coated metal sheet 600mm ridges or hips including all accessories complete - 0.5mm CRIL or	27.89	<i>m</i>		
46	Providing and fixing 180mm PVC gutter, including bracketts, bolts, nuts, washers and rain water pipe connection, including the cost of connection pipes, accessories complete (Color and design as per the clients choice) - BSB approved brand.	55.78	<i>m</i>		
47	Provide & fixing on wall face single socketed rigid PVC (working pressure 4kg/cm ²) rain water pipes including jointing with seal ring leaving 10mm gap for thermal expansion - 110mm dia. connected to PVC gutter.. Complete fittings	33.80	<i>m</i>		
	Plumbing				
48	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making the good walls etc. 32 mm nominal outer dia Pipes	65.00	<i>m</i>		

49	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making the good walls etc. 20 mm nominal outer dia Pipes	35.00	<i>m</i>		
50	Providing & fixing PVC pipes including clamps, PVC fittings such as bends, tees, elbows, reducers, crosses, plugs, sockets etc. & repair of walls etc. complete 110mm	6.00	<i>m</i>		
51	Providing & fixing PVC pipes including clamps, PVC fittings such as bends, tees, elbows, reducers, crosses, plugs, sockets etc. & repair of walls etc. complete 75mm dia	20.00	<i>m</i>		
52	Hand excavation & refilling in layers < 200mm of trenches for pipes & sockets, cables, including dressing of sides, ramming of bottom, depth <1.5mm and disposal of surplus material as per the instruction of engineer in-charge... Pipes, cables etc. 80mm				
	All Kinds of Soil - Laying 160mm dia HDPE sewer line and 32mm CPVC Pipe	50.00	<i>m</i>		
53	Providing & fixing Stainless steel kitchen sink double bowl & single drain board with all connections and its accessories complete... Size 1740x520x200mm, (Sample to be approved by client/site engineer)	2.00	<i>each</i>		

54	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 (SQCA approved brand/Sample to be approved by client/site engineer)	8.00	<i>each</i>		
55	Providing & fixing Indian - type vitreous china WC including 100mm HCI P or S trap, 10l low level vitreous china cistern & fittings and repair of walls, etc. complete - 500x400 Hindustan pan.20.018 or equivalent (SQCA approved brand/Sample to be approved by client/site engineer)	2.00	<i>each</i>		
56	Providing & fixing 15mm Angular stop cock (SQCA approved brand/Sample to be approved)	10.00	<i>each</i>		
57	Providing & fixing C.P bibcock - 15mm, standard vertical,c.p knob (SQCA approved brand/sample to be approved)	14.00	<i>each</i>		
58	Providing & fixing of c.p towel rail with c.p brass brackets fixed to wooden cleats.	4.00	<i>each</i>		
59	Providing & fixing 600 x 450mm bevelled edge mirror (superior glass) screwed on ply board & wooden frame including the cost of nails & screws complete	2.00	<i>each</i>		
60	Providing & fixing CP gratings 100mm dia. on floors of bath, toilet, kitchen waste, etc	12.00	<i>each</i>		
61	Providing & fixing C.I Nahani trap - 100mm inlet & 75mm outlet	12.00	<i>each</i>		
	Drainage works				
62	Providing & laying 50mm thick Plinth Protection and grouted with fine sand mix including well rammed finishing the top smooth with cement concrete 1:3:6, 20mm aggregate laid over 75mm thick layer of compacted gravel (40mm)	115.20	<i>sq.m</i>		

	Constructing second class brick masonry open surface drain in cement mortar 1:4 including earth work in excavation 300 mm thick conc bed 1:5:10. 40mm agg and 25mm thick cemented concrete 1:2:4, 12mm agg for filling haunches including 12mm cement plastering 1:4 with the floating coat of neat cement and disposal of surplus earth etc. complete, External and Internal				
63	200mm x 200mm depth	101.00	<i>m</i>		
64	250mm x 300mm depth	18.52	<i>m</i>		
65	Extra for additional depth of brick masonry drain 250mm wideper metre additional depth	18.52	<i>m</i>		
	Constructing brick masonry manhole in cement mortar 1:5, R.C.C top cover slab with 1:2:4, 20mm aggregates, 1:4:8, 40mm aggregate, 12mm plaster in CM 1:3 finished with floating coat of neat cement and making channel in cement mortar 1:2:4, 20mm aggregates, including additional depth of				
66	Internal dimension 900 x 800mm & 450mm deep including C.I cover & frame (weight > 38Kg)	2.00	<i>each</i>		
67	Constructing Septic Tanks, in R.R Masonry in cement mortar 1:6, 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 .50 users	1.00	<i>each</i>		
68	Constructing Soak Pit Size 1200x1200x1200mm, filled with brick bats including 100mm SW drain pipe X 1200mm long	1.00	<i>each</i>		
69	Providing and fixing toilet paper holder -CP brass Jaguar Brand	2.00	<i>each</i>		
70	Providing and fixing soap dish/dispenser Recessed, ceramic 150x150mm	5.00	<i>each</i>		
	Plastering				

71	Providing and laying 6mm cement plaster in ceiling (slab, beams, coulumns) CM 1:4	165.01	<i>sq.m</i>		
72	Providing and laying 15mm cement plaster for internal walls in CM 1:4	417.21	<i>sq.m</i>		
73	Providing and laying 20mm cement plastrer in CM -1:4 (Ext)	315.06	<i>sq.m</i>		
74	Providing and applying finishing coats: JK or equivalent wall putting over internal plastered walls, with minimum 3 coats and mix as per manufacture specification.	582.22	<i>sq.m</i>		
	Painting				
75	Wood work-pink primer	429.13	<i>sq.m</i>		
76	Providing & applying two coats of Acrylic washable distemper (Neralac Suraksha Paints or equivalent) including cement primer ... Internal plastered walls of approved brand as per instruction of site engineer (Internal walls not included in Rabsey portion)	817.12	<i>sq.m</i>		
77	Providing & applying two coats of Dulux Emulsion paint/weather shield including primer on external plaster walls of approved brand as per manufactureres specifications & instruction of site engineer (External walls not included in Rabsey portion)	435.42	<i>sq.m</i>		
78	Providing and applying finishing coats synthetic enamel for wood work two coats	429.13	<i>sq.m</i>		
79	Providing, preparing and applying Sumdang Traditional Bhutanese paintings (Washable) - Ding (Rate quoted should be able to cover the cost for applying paintings to all cornices on external portions, timber works. etc complete...(but excluding the measurement of Rabsey portion which covers false Ekra walls, Bands, Window & its cornice, Timber works in window, etc.)	13.05	<i>sq.m</i>		
	Stone Masonry				

80	Providing & laying Random Rubble Masonry with hard stone in cement mortar 1:5 for all height including soling, pcc, weep hole.	169.74	<i>cu.m</i>		
		<i>Civil Work Total Amount</i>			

