

Name of Work :- C/o Ultra Low Temperature Lab Building, IISER MOHALI.						
BOQ						
S. No	DSR Ref	Description of Items	Unit	Qty	Rate	Amount
PART A		EARTH WORK				
1.1	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 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	316.00	Cum		
1.2	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 upto 1.5 m.	180.00	Cum		
1.3	2.27	Supplying and filling in plinth with 100 mm thick sand under floors including, watering, ramming consolidating and dressing complete.	29.00	Cum		
2		CONCRETE WORK				
2.1	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.8	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	47.50	Cum		
2.2		DAMP PROOF COURSE				
2.2.1	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).	10.00	Sqm		
2.2.2	4.12	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.	2.60	Kg		
2.2.3	4.13	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	10.00	Sqm		

2.3	4.17	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1cement : 3 coarse sand : 6 graded stone grit nominal 20 mm size) over 75 mm bed of dry brick ballast duly rammed and consolidated complete, including finishing the top smooth. (115 thk. toe wall calculated in brick work)	58.50	Sqm		
3		REINFORCED CEMENT CONCRETE				
3.1	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
3.1.1	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	106.00	Sqm		
b		For columns , pedestals up to plinth lev	58.00	Sqm		
3.1.2	5.9.3	Suspended floors, roofs, landings, balconies and access platform.	200.00	Sqm		
3.1.3	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	280.00	Sqm		
3.1.4	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts.	180.00	Sqm		
3.2		REINFORCEMENT FE 415				
	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
3.2.1	5.22.6	FE 415 Thermo-Mechanically Treated bars	14160.00	Kg		
3.2B		REINFORCEMENT SS 316				
		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete with SS 316.	1000.00	Kg		
3.3		CONCRETING M20				
	5.1	Reinforced cement concrete of 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) in building up to floor V level, excluding the cost of centering, shuttering finishing and reinforcement as per direction of Engineer-in-charge.				
3.3.1	5.1.2	All work upto plinth level.	160.00	Cum		
3.3.2	II	All work above plinth level				
	5.2.2	RCC WORK IN COLUMN	13.50	Cum		
	5.3+	Roof Slabs	31.50	Cum		
	5.3+	RCC in Beams	22.00	Cum		
4		BRICK WORK				
4.1	6.1	Brick work with F.P.S. bricks of class designation 75 in foundation & plinth :				
	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	16.50	Cum		
4.2	6.4	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level upto floor V level in all shapes and sizes in :				

	6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	82.50	Cum		
	6.5	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level upto floor V level in all shapes and sizes in half brick walls in 1:3 cement and coarse sand mortar:	10.00	Sqm		
5	STEEL					
5.1	NS	NIL	0.00	Sqm		
6	FLOORING					
6.1	COPING OVER PARAPETS					
B	11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.				
	11.41.2	Size of Tile 600x600 mm	196.00	sqm		
C	11.39	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
		40 mm thick with 20 mm nominal size stone aggregate	99.00	Sqm		
8	PLASTER					
8.1	13.1	12 mm cement plaster of mix :				
	13.1.2	1:6 (1 cement : 6 fine sand)	616.00	Sqm		
8.2	13.5	15 mm cement plaster on rough side of single or half brick wall of mix :				
	13.5.2	1:6 (1 cement : 6 fine sand)	175.00	sqm		
8.3	13.16	6 mm cement plaster IN CEILING of mix :				
	13.16.1	1:3 (1 cement : 3 fine sand)	284.00	sqm		
8.5	DRIP COURSE IN PLASTERING					
	5.30	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	20.00	RM		
9	FLOORING					
	11.13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.				
	11.13.1	40 mm wide and 4 mm thick	250.00	Mtr		

10		PAINTING				
9.1	13.8	Providing and applying two coats of cement based readymade wall putty (JK white/ Birla care or equivalent) including preparing the surface smooth by sand papering etc. as per directions of the Engineer Incharge. The consumption of wall putty shall not be less than 5 kg for 10 sqm for both the coats. The putty shall be prepared strictly as per detailed manufacturer's specifications and applying after cleaning the surface thoroughly. Required curing should be done before application of first coat and also subsequent coat. The wall surface so prepared after application of both the coats of putty shall be rubbed with Amery paper 320 nos. to make it smooth surface suitable for any type of painting. The rates includes all the operations including required scaffolding at all levels & heights complete in all respect.	900.00	Sqm		
9.2	13.41	Distempering with oil bound washable distemper of approved brand and make to give an even shade				
	13.41.1	New work (two or more coats) over and including priming coat with cement primer.	900.00	sqm		
9.3	13.45.1	Painting outer surfaces of walls with Texturised paint Rustic complete with approved brand of paint in desired shade in two or more coats with and including one priming coat.	518.00	sqm		
11		ALUMINIUM WORK				
10.1	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
	21.1.1	For fixed portion				
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	350	kg		

	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
10.1	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	110 kg			
	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):				
	21.3.1					
	21.3.2	With float glass panes of 5.00 mm thickness	58 sqm			
	21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
	21.4.1	With stainless steel cover plate minimum 1.25 mm thickness	9 nos			
10.2		HARDWARE				
A	9.70	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :				
	9.70.1	125x64x1.90 mm	56 Nos			
B	9.77	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles of approved quality with necessary screws etc. complete.	10 Nos			
C	9.81	Providing and fixing bright finished brass handles with screws etc. complete:				
	9.81.1	125 mm	28 Nos			

D	9.101	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
	9.101.2	Twin rubber stopper	14	Nos		
E	9.97	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
	9.97.1	300x10 mm	14	Nos		
12		COMMERCIAL BOARD DOOR SHUTTERS				
	9.21.2 + 9.23	Providing and fixing 35 mm thick phenolformaldehyde bonded commercial board flush door conforming IS 2202 with 1 mm thick laminate on both sides & second class teak wood polished lipping 6 mm. x 37 mm. on all sides with all fixtures and fastenings etc. complete in all respect as per the directions of Engineer In charge hardware shall be paid separately. refer drg. No.1003/AL/1139/R0 dated: 14.07.15	22	sqm		
13	12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
	12.41.2	110 mm dia	28.44	Mtr		
14	22.7.1	Providing and laying integral cement based water proofing treatment including preparation of surface, and applying a slurry of cement @ 2.75 kh / sqm and on adjoining walls upto 300 mm ht , laying brickbats with cement mortar in cement mortar of 1 : 5 (1 cement : 5 coarse sand) over 20 mm bed of cement mortar of 1 : 5 in required slope and on walls upto 300 mm ht , and cement mortar 20 mm thick over the brick bats laid. complete including cost of water proofing compound as per IS 2645.100 mm Brick bat Coba treatment over roof with acrylic water proofing compound cement plaster and rounding of junctions of wall by 1:4 cement coarse sand.	181.02	sqm		
		Providing and fixing 5mm thick NEOPRENE ruber sheet in the foundation as per the direction of Engineer-in-Charge	101.76	sqm		

15	10.18	Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S. sheet box by means of 3.3mm dia. round headed screws, one lock at the corners. Clamp shall be made of 12mm dia M.S. bar bent to shape as per standard drawing.	9.00	Nos		
		Total				

(Contractor)