

**BILL OF QUANTITY FOR THE WORK OF "RENOVATION OF CIVIL, PLUMBING AND
FURNITURE WORKS FOR WET LABORATORY, EQUIPMENT CUM STUDENT
SITTING ROOM AT BIOLOGICAL CHEMISTRY BUILDING (Dr. Anindita Das), IACS"**

Sl. No.	Description of Items	Unit	Quantity	Rate/Unit (Rs.)	Amount (Rs.)
1	DISMANTLING WORK				
1.1	Stripping off worn out plaster (outside and inside) and raking out joints of walls, ceiling etc. upto any height and in any floor including removing rubbish and stacking any where within the compound as directed by EIC.	Sq.M	25.00		
1.2	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as per direction of EIC.	Cu.M	5.00		
1.3	Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m	Cu.M	5.00		
1.4	Dismantling wash basin with brackets with all waste fittings.	Each	2.00		
1.5	Dismantling E.P. or Anglo-Indian W.C.	Each	2.00		
1.6	Labour for dismantling G.I. pipe with all fittings including Bib cock, Stop cock, Pillar cock etc.				
a).	20mm / 25 mm /32 mm dia pipe	Mtr	20.00		
2	CIVIL WORK				
2.1	Brick work with 1st class bricks in cement mortar (1:6) at 1st floor of Biological Chemistry Building.	Cu.M	2.00		
2.2	125 mm. thick brick work with 1st class bricks in cement mortar (1:4) at 1st floor of Biological Chemistry Building.	Sq.M	10.00		
2.3	Plaster to wall, ceiling etc. with coarse sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or roughening of concrete surface including throating, nosing and drip course where necessary. Thickness of Plaster is 20mm with 1:6 ratio. The rate is inclusive required scaffolding and staging at any level.	Sq.M	25.00		

2.4	Applying two coats of Mastercrete M-81 (Acrylic Co-polymer) or equivalent acrylic latex mixed with cement in the ratio of 1:2 by means of brush two coats at an interval of 12 hrs. each, curing the the coating for three days.	Sq.M	15.00		
2.5	Supplying and laying true to line and level vitrified tiles of approved brand (size not less than 600mmx600mmx10mm thick) in floor, skirting etc. set in 20mm sand cement mortar (1:4) and 2mm thick polymerised adhesive at the back side of tiles (6mm thick layer applied directly over finished artificial stone floor without any backing course) laid after application slurry using 1.75Kg of cement per sq.m below mortar only, joints grouted with admixture of white cement and colouring pigment to match with colour of tiles / epoxy grout materials of approved make as directed and polishing the tiles using soft and dry cloth upto mirror finish complete including the cost of materials, labour and all other incidental charges complete true to the manufacturer's specification and direction of Engineer -In-Charge.	Sq.M	40.00		
2.6	Supplying, fitting & fitting granite slabs 15mm to 18mm thick with uniform texture & without decorative veins in Skirting, top of wooden working bench making suitable arrangements to hold the granite slabs properly by 15mm thick cement mortar (1:2) / suitable adhesive on wooden surface. The joints filling with admixture of pigment matching of stone shades and edges are moulded as per direction of EIC.	Sq.M	20.00		
2.7	Cleaning the concrete surface by removing dirt and debris, marking defective locations and removing loose concrete by careful stripping until hard surface is exposed, cutting the concrete to regular shape, wire brushing the exposed surface and removing debris from site complete as per direction of the Engineer - in - Charge.	Sq.M	8.00		
2.8	Cleaning the exposed reinforcement preferably upto full diameter by wire brush, applying two coats of polymer based rust removing compound left for 24 hours, removing the coating and then applying two (2) coats of polymer of reinforcement as per manufacturer's specification] [Mode of measurement:The affected surface area of reinforcement shall be considered for payment]	Sq.M	8.00		

2.9	Applying epoxy based reactive joining agent for joining the old concrete with fresh concrete to be applied within manufacturer's specified time as per manufacturers specification. (0.4 Kg / m ² of concrete surface).	Sq.M	8.00		
2.10	Applying 2 coats of bonding agent with synthetic multi functional rubber emulsion having adhesive and water proofing properties by mixing with water in proportion (1 bonding agent : 4 water : 6 cement) as per Manufacturer's specification	Sq.M	8.00		
3	FALSE CEILING				
3.1	Providing and fixing at all height False Ceiling of 12.5 mm thick Gypsum Board of Casoprano, Sundance vairyety (semi-perforated) of India Gypsum or equivalent conforming to IS: 2095 including the frame work by 15mm narrow flashed stiched suspension grid system using 32mm x 15mm Tee section and grid of 600mm x 600mm. Main runner to be fixed by 2mm thick pre-streched GI wire with soffit cleat and GI rawl plug inserted on the main roof to be fixed @ 1220 c/c. All base frame material clip should be of cold rolled steel components and coated with hot dip galvanized steel. It should have a capping of material coated with backed polyester paint. The item includes cost of two coatsof primer suitable for Gypsum board and also including the cost of making opening for light fittings, grills, diffusers, cut outs made with perimeter channels suitably fixed all complete excluding the cost of the painting.	Sq.M	35.00		
4	WOOD WORK				
4.1	Wood work for frame structure making partition wall fitted and fixed in position complete including a protective coat of primer painting.	Cu.M	0.40		
4.2	Supplying, fitting and fixing of bubble free float glass (6mm thick) of approved make and brand with wooden bead incliding polishing at the middle portion of wooden Partition.	Sq.M	5.00		

4.3	Supplying, fitting and fixing boiling water proof 16mm thick ply conforming to IS: 710-1977 bonded with phenol formaldehyde synthetic resin conforming to IS: 848-1974 of approved make and brand fitted and fixed as per design as per approval and direction of Engineer-in-Charge.	Sq.M	25.00		
4.4	Supplying fitting, fixing decorative lamination (thickness of laminate 1 mm) conforming to IS: 2046 : 1995 as per approved make, brand, finish and thickness with fitting, fixing on the Boards with recommended / approved adhesive with proper clipping the sides for better attachment as per direction of Engineer-in-charge.The rate includes the cost of labour, adhesive and all incidental charges thereof.	Sq.M	25.00		
4.5	Supplying solid flush type doors (35 mm thick) of commercial quality, the timber frame consisting of top and bottom rails and side styles of well seasoned timber 65mm wide each and the entire frame fitted with 37.5mm wide battens places both ways in order to make the door of solid core and internal lipping with Garjan or similar wood veneers using phenol formaldehyde as glue etc. complete, including fitting, fixing shutters in position but excluding the cost of hinges and other fittings in 2nd floor. The rate is inclusive removing the existing panel doors and included all fitting & fixture like S.S hinges, tower bolts, Godrej lock, S.S. handle etc.	Sq.M	5.00		
4.6	French polishing to wood work on new and old surface (including removing existing polish upto the satisfaction of EIC) preparing the surface all complete.	Sq.M	10.00		
4.7	After removing the existing door again fixing the same in same position, openable outside the room including complete all mending damage, providing new S.S hinges, screws, polishing all complete.	Each	3.00		
5	PAINTING				
5.1	Priming one coat on timber, plastered surface with systhetic oil bound primer of approved quality including smoothening surface by sand papering etc.	Sq.M	330.00		

5.2	Applying Acrylic Emulsion Paint approved make and brand on walls and ceiling including sand papering in intermediate coats including putty. Two or more coats to give an even shade.	Sq.M	330.00		
5.3	Rendering the surface of walls, ceiling with white cement based wall putty of approved make and brand. (1.5mm thick).	Sq.M	150.00		
6	ALUMINIUM WORKS				
6.1	Providing and fixing anodized Aluminium work of approved shade for window as per approved design using extruded standard sections of HINDALCO conforming to IS: 733 and IS: 1285, anodized colour of approved shade according to IS: 1868 fixed with rawl plugs and screws or with fixing clips including necessary filling up of gaps at junction, at top, bottom and sides with required neoprene felt etc.. This item will include all necessary standard accessories like P.V.C weather gasket, EPDM glazing gasket, handle, hinges and applying polysulphide sealant all round periphery of the window, along with 5mm thick tinted float glass/frosted glass approved colour all complete. The rate is inclusive taking out the existing steel window.	Sq.M	4.00		
7	SANITARY AND PLUMBING WORKS				
7.1	Supplying, fitting and fixing G.I pipes of TATA make with all necessary accessories, special viz. socket, bend, tee, union, elbow, nipple, long screw, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, cutting pipes, making threads, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position.				
a).	15mm dia. Medium quality.	Metre	3.00		
b).	20mm dia. Medium quality.	Metre	3.00		
c).	32mm dia. Medium quality.	Metre	2.00		
7.2	Supplying, fitting and fixing PVC pipes of approved make of (Medium duty) of 50mm dia. Inside the outside wall.	Metre	10.00		

7.3	Supplying, fitting and fixing Peet's valve fullway gunmeta statnard pattern best quality of approved brand bearing ISI marking with fittings.				
	a). 32 mm	Each	1.00		
	a). 20 mm	Each	2.00		
	a). 15 mm	Each	11.00		
7.4	Supplying, fitting and fixing Chromium plated Bib Cock short body (Equivalent to Code No.511 & Model - Tropical/sumthing Special of ESSCO or similar brand.	Each	2.00		
7.5	Supplying, fitting and fixing Chromium plated Stop Cock (Equivalent to Code No.514A & Model - Tropical/sumthing Special of ESSCO or similar brand.	Each	2.00		
7.6	Supplying, fitting and fixing white vitreous china best quality approved make Wash Basin (Size 550mm x 400mm) with G.I brackets including C.P waste fittings of 32mm dia., one approved quality brass C.P Pillar cock of 15mm dia., approved quality P.V.C waste pipe with C.P nut 32mm dia., 900mm long approved quality P.V.C connection pipe with heavy brass C.P nut including mending good all damages. The rate inclusive removing the existing wash basin as per direction of FIC.	Each	1.00		
7.7	Supplying, fitting and fixing bevelled edged Mirror (600mm x 450mm) 5.5mm thick silver red as per ISI with brass C.P hinges after removing the existing mirror.	Each	2.00		
8	FURNITURE WORK				

8.1	Providing, Making and fixing of Wooden Island Bench (top plan 2700mmx1500mm) with 900 mm height as per attached drawing. Total construction made of 19mm thick water proof block board, having drawers, shutters with adjustable shelves on the both sides. Regent rack made of Ply wood at the middle on the top. All visible outside surfaces to be finished with 1 mm thick matt finished laminate of approved colour and make. The inside surfaces to be finished with french polish. All free edges of the block board covered with 5mm thick Teak wood beading with polishing. The item includes all the fittings like S.S. Hinges, screws, drawers channels, S.S handles, Godrej Locks, tower bolts etc all complete. [Top surface finished with mirror polished Black granite using proper adhesive, the rate of granite is paid seperately].	Each	1.00		
8.2	Providing, Making and fixing of Wooden working table/Equipment bench of length 3560mm with 900 mm height as per attached drawing. Total construction made of 19mm thick water proof block board, having drawers, shutters with adjustable shelves on the both sides. All visible outside surfaces to be finished with 1 mm thick matt finished laminate of approved colour and make. The inside surfaces to be finished with french polish. All free edges of the block board covered with 5mm thick Teak wood beading with polishing. The item includes all the fittings like S.S. Hinges, screws, drawers channels, S.S handles, Godrej Locks, tower bolts etc all complete. [Top surface finished with mirror polished Black granite using proper adhesive, the rate of granite is paid seperately].				
	a) 760 mm width	Each	2.00		
	b). 575 mm width	Each	1.00		

8.3	Providing, Making and fixing of Wooden Running table (inside the Instrument Cum Sitting Room) 550mm width with 750 mm height as per attached drawing. Total construction made of 19mm thick water proof block board, having drawers, shutters with adjustable shelves. All visible outside surfaces to be finished with 1 mm thick matt finished laminate of approved colour and make. The inside surfaces to be finished with french polish. All free edges of the block board covered with 5mm thick Teak wood beading with polishing. The item includes all the fittings like S.S. Hinges, screws, drawers channels, S.S handles, Godrej Locks, tower bolts etc all complete.	R.M	7.00		
8.4	Providing and fixing of Upper Cabinet (with shutter) 400mm deep, 500mm height and 650mm length fixed by dash fasteners at wall over 2 nos. 50x50x5mm angles. The total construction made of 19 mm thick water proof block board with openable shutters and one and adjustable shelves. All visible outside surfaces to be finished with 1mm thick matt finished laminate of approved colour and make. The inside surface to be finished with french polish. All the free edges of the block board covered with 5mm thick wood beading including melamine finish. All fitting and fixture like S.S hings, tower bolts, locks, handles etc are fixed as per approved of EIC. At the bottom of upper cabinet, 100 mm height pelmet is attached.	Each	15.00		
8.5	Providing, Making and fixing of Wooden working table/Equipment bench of 900mm width with 900 mm height as per attached drawing. Total construction made of 19mm thick water proof block board, having drawers, shutters with adjustable shelves on the both sides. All visible outside surfaces to be finished with 1 mm thick matt finished laminate of approved colour and make. The inside surfaces to be finished with french polish. All free edges of the block board covered with 5mm thick Teak wood beading with polishing. The item includes all the fittings like S.S. Hinges, screws, drawers channels, S.S handles, Godrej Locks, tower bolts etc all complete. [Top surface finished with mirror polished Black granite using proper adhesive, the rate of granite is paid seperately].				
	a). Length 2100mm	Each	2.00		

8.6	Providing, Making and fixing of Wooden Fridge Stand (inside the Instrument Cum Sitting Room) 700mm width, 610mm depth with 1200 mm height as per attached drawing. Total construction made of 19mm thick water proof block board, back side made from 12mm thick Ply. All visible outside surfaces to be finished with 1 mm thick matt finished laminate of approved colour and make. The inside surfaces to be finished with french polish. All free edges of the block board covered with 5mm thick Teak wood beading with polishing etc all complete.	Each	1.00		
8.7	Providing, Making and fixing of Wooden Book Shelf, 1300mm width, 450mm depth with 1830 mm height as per attached drawing. Total construction made of 19mm thick water proof block board, back side made from 12mm thick Ply and having drawers, shutters with adjustable shelves. All visible outside surfaces to be finished with 1 mm thick matt finished laminate of approved colour and make. The inside surfaces to be finished with french polish. All free edges of the block board covered with 5mm thick Teak wood beading with polishing etc all complete. The glass shelves and glass shutter of 10mm thickness fitted with S.S patch fitting and fixture. The item includes all the fittings like S.S. Hinges, screws, drawers channels, S.S handles, Godrej Locks, tower bolts etc all complete.	Each	1.00		
8.8	Making Wooden Tools as per drawing with 4 nos. wooden stand top of 19mm thick block board including finished with lamination as per approved shade and make. The other surface finished with polishing all complete.	Each	8.00		
8.9	Covering the existing wooden rack with 12 mm thick ply including lamination fixing, Polishing the shelves surfaces and other surfaces. The front surface finished with 8mm thick Clear glass sliding shutter, inclusive aluminium channel, magnetic catcher, locking arrangement all complete.	Each	1.00		
8.10	Covering the existing wooden shoe rack with 12 mm thick ply including lamination fixing, Polishing the shelves surfaces and other surfaces. The front surface finished with 19mm thick block board openable shutter, inclusive S.S hinges, handle, locking arrangement all complete.	Each	1.00		
9	MISCELLANEOUS WORKS				

9.1	Providing, fiiting and fixing best quality blinds manually operated with all accessories as per design and direction of EIC.	Sq.M	18.00		
9.2	Providing and fixing of Polyester film (frosted range) of approved make and brand on internal galss partitions as per design and instruction of EIC.	Sq.M	8.00		
				TOTAL	