

**"RENOVATION OF CIVIL AND PLUMBING WORKS FOR TOILET NO. 13,14,15, 20 & 21
OF MAIN BUILDING, IACS"**

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
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	100.00			
1.2	Dismantling wash basin with brackets with all waste fittings.	Each	7.00			
1.3	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	70.00			
b).	40mm dia pipe	Mtr	30.00			
2	CIVIL WORK					
2.1	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	100.00			
2.2	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 coating for three days.	Sq.M	20.00			

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
2.3	Supplying, Fitting & Fixing 30 mm thick both side prelaminated Factory made solid Panel PVC Door Shutter consisting of outer frame made out of M.S. tubes of 19 gauge thickness and size 19 mmx19 mm for styles, top and bottom rails, M.S. frame shall have cost of steel primers of approved make and manufacture, M.S. frame covered with 5 mm th.heat moulded PVC "C" channel of size 30 mm th, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on either sides forming styles; and 5 mm th. 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm tapered in 45 degree on the inner side to form top & bottom rail and 115 mm wide PVC sheet out of which 75mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel with 10 mm (5 mmx2) th.,20 mm wide cross PVC sheet as gap insert for top rail and bottom rail sheet to be fitted in the M.S. frame welded/sealed to the styles &rails with 7 mm (5 mm+2 mm) th.x15 mm wide PVC sheet beading on inner side and joined together with solvent cement adhesive. An additional 5 mm th. PVC strip of 20 mm which is to be stuck on the interior side of the "C" channel using PVC solvent adhesive etc. complete excluding all necessary hardwares as per direction of Engineer-in-Charge. The rate is inclusive all fitting and fixture like s.s	Sq.M	10.00			
2.4	Supplying, Fitting & Fixing Factory made prelaminated P.V.C. door frame of size 50 mmx47 mm with a wall thickness of 5 mm, made out of extruded 5 mm Prelaminated PVC sheet miter cut at two corners and joined with two nos of 1.5 mm long brackets of 15 mm x15 mm M.S. square tube. The two vertical door profiles are to be reinforced with 19 mmx 19 mm M.S. Square tube of 19 gauge, weather seal to be provided through out the frame. The door frame shall be fixed with the wall using 65/100 mm M.S. Screws through the frame by using P.V.C fasteners. A minimum of 4 Nos of screws to be provided for each vertical member and minimum 2 Nos for horizontal member etc. complete as per Manufacturer's specification and direction of Engineer-in-Charge.	Mtr	29.00			

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
2.5	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	8.50			
2.6	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	8.50			
2.7	Ordinary Cement Concrete (mix1:2:4) with graded stone chips (20mm nominal size) excluding shuttering and reinforcement. The rate is inclusive required scaffolding at any level.	Cu.m	3.00			
2.8	Applying epoxy based reactive joining agent for joining the old concrete with fresh concrete to be applied within manufacturer's specified time and specification. (0.4 kg/sq.m of concrete surface). The rate is inclusive required scaffolding at any level.	Sq.M	10.00			

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
2.9	37.5 mm thick Cement Concrete (1:1.5:3) with graded stone chips 5.6 mm size with hexagonal square mesh wire netting, I.R.C fabric mesh or X.P.M fitted and fixed after tying the existing reinforcement on concrete without distributing the same and with proper scarping and cleaning the reinforcement and disturbed concrete with wire brush etc. after applying a coat of cement including the cost of wire netting I.R.C or X.P.M & cost of all handling and scaffolding complete as per direction of Engineer-In-Charge. The rate is inclusive required scaffolding at any level. [It.No. 18(c) /P- 28]	Sq.M	10.00			
2.10	Providing and fixing of false ceiling with white powder coated exposed G.I grid suspension system (E-Grid T 2430 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200mm c/c) consisting of Main Runner 3600 mm long, Cross Tee 1200 mm /600mm long and Wall Angle. The Wall Angle shall be fixed on PVC Dash Fasteners on the perimeter of the wall bt steel screws with distance 300mm	Sq.M	12.00			
3	PAINTING					
3.1	Cleaning the walls and ceiling by scraping, sand papering and smoothening down the surface including scaffolding and staging at any level complete as per direction of EIC.	Sq.M	170.00			
3.2	Priming one coat on timber, plastered surface with synthetic oil bound primer of approved quality including smoothening surface by sand papering etc.	Sq.M	170.00			
3.3	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	170.00			
3.4	Rendering the surface of walls, ceiling with white cement based wall putty of approved make and brand. (1.5mm thick).	Sq.M	100.00			
4	FLOORING					

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
4.1	Supplying and laying true to line and level Vitrified tiles (Grey and black series) of approved brand (size not less than 600mm x 600mm x 10mm thick) in floor, skirting etc. Set in 20mm sand cement mortar (1:4) and 2mm thick cement slurry back side of tiles using cement @ 2.91kg/Sq.m or using polymerised adhesive laid after application slurry using 1.75 Kg 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. The rate is inclusive of all materials, labour and all other incidental charges complete true to the manufacturer's specification and direction of EIC.	Sq.M	50.00			
4.2	Supplying, fitting & fixing Granite slabs 15mm to 18mm thick with uniform texture and without decorative veins in walls with 15mm thick (avg.) cement mortar (1:2) including making suitable arrangement with admixture of pigment matching the stone shades all complete as per direction of EIC	Sq.M	4.00			
4.3	Supplying, fitting & fixing 1st class quality Ceramic tiles in walls and floors to match with the existing floor level Set in 20mm sand cement mortar (1:4) and 2mm thick cement slurry back side of tiles using cement @ 2.91kg/Sq.m or using polymerised adhesive laid after application slurry using 1.75 Kg 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. The rate is inclusive of all materials, labour and all other incidental charges complete true to the manufacturer's specification and direction of EIC.					
	(A). WALL					
	With Sand Cement Mortar (1:4) 15mm thick and 2mm thick cement slurry at back side of tiles with adhesive.	Sq.M	170.00			
5	ALUMINIUM WORKS					

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
5.1	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 peripheri 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	7.00			
6	SANITARY AND PLUMBING WORKS					
6.1	Supplying, fitting and fixing G.I pipes of TATA make with all necessary accessories, special viz. socket, bend, tee, union, elbow, nipple, longscrow, 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	5.00			
b).	20mm dia. Medium quality.	Metre	40.00			
c).	32mm dia. Medium quality.		20.00			

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
6.2	Supplying, fitting and fixing PVC pipes of approved make of (medium duty) conforming to ASTM-D-1785 and threaded to match with GI Pipes as per IS:1239(Part-I) with all necessary accessories special viz. socket, bend, tee, P & S Trap union, elbo, nipple, long screw, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, 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 above ground floor.(Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials.)					
	a). 15 mm dia.	Metre	15.00			
	b). 20 mm dia.	Metre	60.00			
6.3	Supplying, fitting and fixing PVC pipes of approved make of (Medium duty) of 50mm dia. Inside the outside wall.	Metre	25.00			
6.4	Supplying, fitting and fixing Peet's valve fullway gunmetal standard pattern best quality of approved brand bearing ISI marking with fittings.					
	a). 32 mm	Each	6.00			
	b). 20 mm	Each	6.00			
	c). 15 mm	Each	2.00			
6.5	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	8.00			
6.6	Supplying, fitting and fixing Chromium plated Stop Cock (Equivalent to Code No.514A & Model - Tropical/sumthing Special of ESSCO or similar brand.	Each	22.00			

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
6.7	Supplying, fitting and fixing 10 litre P.V.C low down cistern conforming to IS specification with P.V.C fittings complete including G.I brackets all complete after dismantling and removing the existing P.V.C as per direction of EIC.	Each	6.00			
6.8	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 EIC.	Each	9.00			
6.8	Supplying, fitting and fixing Pedestal of approved make for Wash Basin.	Each	7.00			
6.9	Supplying, fitting and fixing E.W.C in white glazed vitreous chinaware of approved make complete in position with necessary bolts, nuts etc.after dismantling and removing the existing E.W.C as per direction of EIC.	Each	7.00			
6.10	Supplying, fitting and fixing Closet Seat of approved make with lid and C.P hinges, rubber and brass screws complete.	Each	6.00			
6.11	Supplying, fitting and fixing Flat back Urinal (size 590mm x 390mm x 380 mm) (half stall urinal) in white vitreous chinaware of approved make in position with brass screws all complete after dismantling and removing the existing flat back urinal as per direction of	Each	7.00			
6.12	Supplying, fitting and fixing urinal flush pipe fittings of approved brand and make.	Each	7.00			
6.13	Supplying, fitting and fixing 18mm thick Marble partition slab with chawk doongri marble square cut, both sides polished with two front corners rounded and edges polished.	Sq.m	5.00			

Sl. No.	Description of Items	Unit	Qty.	Rate/Unit (Rs.)	Amount (Rs.)	Reference
6.14	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	9.00			
6.15	Supplying, fitting and fixing Glass shelf with aluminium guard rails with ordinary type with 5.5 mm sheet glass (size 600mm x 125mm).	Each	6.00			
6.16	Supply of UPVC pipes (B type) & fitting, fixing conforming to IS - 13592 - 1992. i) single socket 110mm.	metre	10			
6.17	Fittings. Plain Tee. 110mm	Each	2			
6.18	Fittings. Door Tee. 110mm	Each	2			
6.19	Fittings. Door bend. 110mm	Each	2			
6.20	Fittings. 110x110mm P trap with ring	Each	8			
6.21	S , F & fixing 32mm dia. Flush pipe of approved make with necessary fixing materials and clamps complete. Polythene Flush pipe.	Each	6			
				TOTAL		

(Rupees)

Place:
Date :

Signature of the Contractor
with seal