Bill of Quantity

Renovation of windows and allied Civil works at NTC building of BITM, Kolkata.

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
	Dismantling all types of masonry excepting cement			(10)	(10)
1.0	concrete plain or reinforced, stacking serviceable				
	materials at site and removing rubbish as directed within a				
	lead of 150m. At any floor including roof.	2	Cum	447.00	894.00
2.0	Dismantling all types of plain cement concrete works,				
	stacking serviceable materials at site and removing				
	rubbish as directed with a lead of 150m & at any level				
	(upto 150mm thick).	3	Cum	939.00	2,817.00
3.0	Repairing crack in wall by cement grouting (1:2)				
	including widening the crack on the surface (into V-				
	section) cleaning and packing the same with cement				
	mortar (1:2) and finishing off to match with adjacent				
	surface. (Cement-69 Kg/100 m)	300	Mtr.	13.92	4,176.00
4.0	Stripping off worn out plaster and raking out joints of				
	walls, ceilings etc upto any height and in any floor				
	including removing rubbish within a lead of 150m as				
	directed.	300	Sqm.	19.00	5,700.00
5.0	Providing and laying in position cement concrete of				
	specified grade excluding the cost of centering and				
	shuttering at any floor/ level as per relevant IS code.				
	1:1½:3 (1 Cement: 1½ coarse sand (zone-III) : 3 graded				
	stone aggregate 20 mm nominal size).	1		6 27 4 25	c 07.1 0.5
		1	Cum	6,374.25	6,374.25
	Hire and labour charges for shuttering with centering and				
	necessary staging upto 4 m using approved stout props				
	and thick hard wood planks of approved thickness with				
	required bracing for concrete slabs, beams, columns,				
	lintels, curved or straight including fitting, fixing and striking out after completion of works. 25mm to 30mm				
	thick wooden shuttering as per decision and direction of				
	Engineer-in-charge.	10	Sqm.	335.00	3,350.00
7.0	Brick work with 1st class bricks (Class designation 75) in	10	Sqiii.	333.00	3,330.00
7.0	cement mortar (1:6)				
	In superstructure at any floor.	2	Cum	5,636.00	11,272.00
8.0	125mm thick brick work with 1st class bricks in cement			2,020.00	11,272.00
	mortar (1:4) at any floor.				
	(·) ··· · · · · · · · · · · · · · · ·	10	Sqm.	736.00	7,360.00
9.0	Plaster (to wall, floor, ceiling etc.) with sand and cement		1		,
	mortar including rounding off or chamfering corners as				
	directed and raking out joints including throating, nosing				
	and drip course, scaffolding/staging where necessary at				
	any height.				
	With 1:4 cement mortar, 15mm thick plaster.	300	Sqm.	167.00	50,100.00
10.0	Providing & mixing polymer based water resistant		_		
	bonding agent like Dr. Fixit 101 LW+ or equivalent in				
	cement plaster as per manufacture's specification and				
	direction of EIC.	5	Lit.	360.00	1,800.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
	Neat cement punning about 1.5mm thick in wall, dado,			(10)	(10)
	window, sill, floor etc.				
	NOTE: Cement 0.152 cu.m per100 sq.m.	50	Sqm.	34.00	1,700.00
12.0	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, mitered and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, panelling and Fittings will be paid separately): Anodized aluminium (anodized transparent or dyed to required shade according to IS:1868, Minimum anodic coating of grade AC15)				
12.1	For fixed portion	500	Kg	374.77	187385.00
	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing and fittings wherever required including the cost of EPDM rubber / neoprene gasket etc whatever required (Fittings shall be paid for separately).	700	Kg	453.85	317695.00
13.0	Supplying & fixing bubble free float glass of approved make and brand conforming to IS: 2835-1987. 5mm thick coloured / tinted / smoke glass.	200	Sqm.	875.00	175000.00
14.0	Supplying & fixing stainless steel (SS 304 grade) friction hinge for casement window as per approved brand as directed by Engineer- in -charge. (Natural White) 300mm long	50	Pair	332.00	16600.00
15.0	Supplying Heavy Duty Aluminium Handle (EBCO Type) Colour anodized.	50	Each	105.60	5280.00
16.0	Supplying & fixing Zinc powdered coated star lock.	30	Each	40.00	1200.00
17.0	Supplying & fixing SS roller bearing for sliding window	30	Each	50.00	1500.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
18.0	Filling the gap in between aluminium frame & adjacent				
	RCC / Brick/ Stone work by providing weather silicon				
	sealant over 6mm dia backer rod of approved quality as				
	per architectural drawings and direction of Engineer-in-				
	Charge complete. Upto 5 mm depth and 5 mm width at				
	any floor. The work is to executed on the inside or out				
	side wall upto 30m height from ground level. The rate is				
	inclusive of materials, labour, scaffolding etc. complete. Make: Dr. Fixit, Wacker, Sika, M.Seal.		Per		
	Make. Dr. Fixit, wacker, Sika, M.Sear.	30	Cartridge	240.00	7200.00
19.0	Applying Interior grade Acrylic Primer of approved				
	quality and brand on plastered or concrete surface old or				
	new surface to receive Distemper/ Acrylic emulsion paint				
	including scraping and preparing the surface thoroughly,				
	complete as per manufacturer's specification and as per				
	direction of the EIC at any floor.				
	Water based interior grade Acrylic Primer <i>One coat</i> .	1000	Sqm.	30.80	30,800.00
20.0	Applying Acrylic Emulsion Paint of approved make and				
	brand on walls and ceiling including sand papering in				
	intermediate coats including putty (to be done under				
	specific instruction of Superintending Engineer): Two				
	coats with Luxury Quality (Make: Asian Paints / ICI/ Berger)	1000	Sqm.	70.00	70,000.00
21.0	Applying Exterior grade Acrylic primer of approved	1000	Sqiii.	70.00	70,000.00
21.0	quality and brand on plastered or concrete surface old or				
	new surface to receive decorative textured (matt finish) or				
	smooth finish acrylic exterior emulsion paint including				
	scraping and preparing the surface thoroughly, complete				
	as per manufacturer's specification and as per direction of				
	the EIC at any floor. One Coat.				
	(Make: ICI/ Asian Paints/ Berger/ Nerolac)	500	Sqm.	31.40	15,700.00
22.0	Protective and Decorative Acrylic exterior emulsion paint				
	of approved quality and brand (ICI weathershield Max or				
	equivalent), as per manufacturer's specification and as per				
	direction of Engineer-In-Charge to be applied over acrylic				
	primer as required. The rate includes cost of material,				
	labour, scaffolding and all incidental charges but				
	excluding the cost of primer.				
	Premium 100% Acrylic Emulsion	500	Sqm.	84.00	42,000.00
23.0	Priming one coat on timber or plastered surface with				
	synthetic oil bound primer of approved quality including				
	smoothening surfaces by sand papering etc. (This item is applicable to new work or old work when the original				
	surface has been exposed by removal of old paint)	50	Sqm.	38.00	1,900.00
24.0	Priming one coat on steel or other metal surface with	50	Sqiii.	30.00	1,700.00
27.0	synthetic oil bound primer of approved quality including				
	smoothening surfaces by sand papering etc. (This item is				
	applicable to new work or old work when the original				
	surface has been exposed by removal of old paint)	50	Sqm.	29.00	1,450.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
25.0	Painting with best quality synthetic enamel paint of approved make and brand (Make: ICI/ Asian Paints/ Berger/ Nerolac) including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary.				·
25.1	Two coats (with any shade except white) with super gloss (hi-gloss) on timber or plastered surface.	50	Sqm.	81.00	4,050.00
	Two coats (with any shade except white) with super gloss (hi-gloss) on steel or other metal surface.	50	Sqm.	79.00	3,950.00
26.0	Supplying, fitting & fixing granite slabs 15 mm to 18 mm thick with uniform texture & without decorative veins in columns, wall, facia, riser etc. with 15 mm thick [avg] cement mortar (1:2) including making suitable arrangements to hold the stones properly by brass/copper hooks including pointing in cement mortar (1:2) (1 white cement : 2 marble dust) with admixture of pigment matching the stone shades all complete as per direction of the Engineer-in-charge including cost of all materials, labours, scaffolding, staging, curing and roughening of concrete surface complete. [Using cement slurry at back side of granite @ 4.4 kg/sq.m & white cement slurry for joint filling @ 1.8 kg/sq.m] Area of each Granite slab 0.6 to 1.0 Square meter.				
		25	Sqm.	2,936.00	73,400.00
27.0	Providing edge moulding to granite slabs in counters, vanities, window sill etc. including machine polishing to edge to give high gloss finish all complete as per design approved by Engineer - in - Charge.	100	Rm	125.00	12,500.00
28.0	Supplying and laying true to line and level double charged vitrified tiles of approved brand (size not less than 600mm x 600mm x 10mm thick) in floor, skirting window sill etc. set in 20 mm. thick cement sand mortar (1:4) and 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sqm laid after application slurry using 1.75 Kg. of cement per Sqm. below mortar only, joints grouted with admixture of white cement and colouring pigment to match with colour of tiles/epoxy grout material of approved make as directed and removal of wax coating of top surface of tiles with warm water 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 specifications and direction of Engineer-in-Charge. Light colour.				
		25	Sqm.	1,285.00	32,125.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
29.0	Hire and labour charges for high scaffolding (above 4				
	metre height) for replacing glass panels, painting,				
	uprooting of plant and any other repairing works of				
	building and Sanitary & Plumbing works for external				
	works with 10 cm. dia bamboo as main posts at the rate of				
	1 metre centre to centre and 7.5 cm. dia bamboo ties @				
	0.75 metre apart fitting and fixing with necessary coir,				
	nails etc. This item is to operated as per specific				
	instruction of the Engineer-in-charge.	1	L.S.	10,000.00	10,000.00
30.0	Dismantling of existing MS window carefully and				
	stacking serviceable materials at site as directed by				
	Engineer-In-Charge.	200	Sqm.	80.00	16000.00
31.0	Removal of rubbish, earth, scrap material etc. from the				
	working site and dispose of the same beyond the				
	compound in truck loads in conformity with Municipal/				
	Corporation rules and as per instruction of Engineer – in –				
	Charge.	3	Per Trip	2,500.00	7,500.00

Cost of Civil works ::: 11,28,778.25

GST, as applicable over cost of Civil work @ 12% ::: 1,35,453.39 Cost of Civil works excluding labour welfare cess ::: 12,64,231.64

Labour welfare cess @ 1% ::: 12,642.32

Total amount of Civil Work ::: 12,76,873.96

Say Rs. 12,76,874.00