

BILL OF QUANTITIES (CIVIL WORK)

Name of work: Annual maintenance contract for Civil, Sanitary & Plumbing works at Staff Quarter (Karmi Abas), Kasba, Kolkata for the year 2020-2021.

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.0	Earth Work :::				
1.1	Surface Dressing of the ground in any kind of soil including removing vegetation inequalities not exceeding 15 cm depth and disposal of the rubbish within a lead upto 75 m as directed.	10	Sqm	10.00	100.00
1.2	Earthwork in excavation of foundation trenches or drains, in all sorts of soil (including soil mixed with garbage/ heterogenic soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75mtr. as directed. The item includes necessary trimming the sides of trenches, leveling, dressing and ramming the bottom, bailing out of water etc. as required complete. Depth of excavation not exceeding 1500mm.	2	Cum.	119.27	238.54
1.3	Earthwork in filling in foundation trenches or plinth with good earth, in layers not exceeding 150mm. including watering and ramming etc. layer by layer complete. (Payment to be made on the basis of measurement of finished quantity of work) With earth obtained from excavation of foundation.	2	Cum.	77.54	155.08
1.4	Filling in foundation or plinth by silver sand in layers not exceeding 150mm as directed and consolidating the same by thorough saturation with water ramming complete including the cost of supply of sand. (Payment to be made on measurement of finished quantity)	1	Cum.	936.21	936.21
2.0	Dismantling, Cutting Holes etc. :::				
2.1	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as directed within a lead of 150m. At any floor including roof.	0.5	Cum	447.00	223.50
2.2	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.				
2.2.1	a) Upto 150mm. Thick	0.5	Cum	939.00	469.50
2.2.2	b) Above 150mm thick	0.5	Cum	1,417.00	708.50
2.3	Dismantling R.C. floor, roof, beams etc. including cutting rods and removing rubbish as directed within a lead of 150m. Including stacking of steel bars.	0.5	Cum	1,956.00	978.00
2.4	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.	20	Sqm	19.00	380.00
2.5	Cutting holes and subsequent mending good of damages. Diameter upto 150 mm.				
2.5.1	a) In brick work [Cement - 4.0 kg/Mtr]	1	Mtr.	111.00	111.00
2.5.2	b) In concrete work (plain or R.C) [Cement - 3.0 Kg/Mtr.]	1	Mtr.	137.00	137.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
2.6	Removal of rubbish, earth etc. from the working site and disposal of the same, beyond the compound in conformity with the Municipal / Corporation rules for such disposal, loading into truck and cleaning the site in all respect as per direction of Engg.-in-Charge.	10	Cum	166.00	1,660.00
3.0	Plain and Reinforced Concrete and Allied Works :::				
3.1	Ordinary cement concrete (mix 1:2:4) with graded stone chips (20mm nominal Size) excluding shuttering and reinforcement, if any at any floor/level.	0.5	Cum.	5,449.81	2,724.91
3.2	Ordinary cement concrete (mix 1:1.5:3) with graded stone chips (20mm nominal Size) excluding shuttering and reinforcement, if any at any floor/level.	0.5	Cum.	5,999.81	2,999.91
3.3	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.In any floor.				
3.3.1	a) 25mm to 30mm thick wooden shuttering as per decision and direction of Engineer-in-charge.	2	Sqm.	335.00	670.00
3.3.2	b) Steel shuttering or 9 to 12 mm thick approved quality ply board shuttering in any concrete work.	1	Sqm.	369.00	369.00
3.3.3	c) 25mm to 30mm thick wooden shuttering without staging in foundation/ floor.	2	Sqm.	209.00	418.00
3.4	Extra for staging in any floor (Mode of measurement: area in plan x mean height of staging upto any height & level)	2	Cum	61.00	122.00
3.5	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction. For works in foundation, basement and upto any floor & any height, using Tor/ Mild Steel JSW/JSPL/SHYAM/SRMB/BMASL/ELECTROSTEEL/SSL	0.05	MT	68,200.00	3,410.00
3.6	Supplying and laying Polythene sheet (150gm/ Sqm) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches.	5	Sqm.	24.00	120.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.7	40 mm. thick damp proof course with cement concrete (1:1.5:3) (with graded stone chips 20 mm nominal size) with water proofing compound of approved brand @ 0.2% weight of cement including cost of materials over two coats of non toxic acrylic polymer modified cementitious waterproofing slurry coat complete [cost of water proofing compound and non toxic paint to be paid seperately) for underground water retaining structures.	1	Sqm.	297.00	297.00
4.0	Masonry and Allied Works :::				
4.1	Single brick flat soling with picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand.	1	Sqm.	361.00	361.00
4.2	Labour for laying single brick flat soling with departmental bricks including carriage of departmental bricks within a lead of 150 metres preparation of bed as necessary with brick joints properly filled in and packed with local sand or powdered earth and including necessary cushion of similar materials below the soling. (The item include the cost of obtaining local sand or powdered earth)	10	Sqm.	40.00	400.00
4.3	Brick work with 1st class bricks (Class designation 75) in cement mortar (1:6)				
4.3.1	a) In foundation and plinth	0.2	Cum.	5,413.00	1,082.60
4.3.2	b) In superstructure at any floor.	0.5	Cum.	5,636.00	2,818.00
4.4	125mm thick brick work with 1st class bricks in cement mortar (1:4) in any floor.	3	Sqm.	736.00	2,208.00
4.5	75 mm thick brick work with 1st class bricks set in cement, sand mortar (1:4) in ground floor including H.B. netting in every alternate layer. In any floor.	2	Sqm.	504.00	1,008.00
4.6	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor). [Excluding cost of chipping over concrete surface]				
4.6.1	With 1:6 cement mortar 15mm. Thick.	30	Sqm.	151.00	4,530.00
4.6.2	With 1:4 cement mortar 10mm. Thick.	10	Sqm.	133.00	1,330.00
4.7	Labour for Chipping of concrete surface before taking up Plastering work.	10	Sqm.	21.00	210.00
4.8	Ornamental brick edging (75 mm wide) in compound roads, gardens etc. with 1st class or picked jhama bricks laid diagonally on end and with a corner slightly raised from the adjoining surface thus giving saw tooth appearance including cutting trench laying bricks and repacking the trench thoroughly on both sides of the edging complete as per direction.	2	Mtr.	72.88	145.76

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
4.9	Bricks edging 75mm wide with picked jhama bricks, laid true to line and level including cutting necessary trench in soil or in hard metalled surface, laying the bricks and repacking the trench (on both sides on the edging) with spoils and ramming the same thoroughly, complete as per direction. Brick-on- end edging (125 mm) depth	2	Mtr.	46.16	92.32
4.10	Labour for taking out brick on-edge of herring bone bond including removing debris to flank or berm sorting out serviceable materials and stacking.	5	Sqm.	17.32	86.60
5.0	Floor Finish and Allied Works :::				
5.1	Neat cement punning about 1.5mm thick in wall, dado, window sill, floor etc. (cement 0.152 cum per 100 Sqm)	20	Sqm.	34.00	680.00
5.2	Artificial stone in floor, dado, staircase etc with cement concrete (1:2:4) with stone chips, laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (1:2) including smooth finishing and rounding off corners including raking out joints or roughening of concrete surface and application of cement slurry before flooring works using cement @ 1.75 kg/sq.m all complete including all materials and labour. In ground floor 3 mm. thick topping (High polishing grinding on this item is not permitted with ordinary cement). Using grey cement, 25 mm. thick.	1	Sqm.	273.00	273.00
5.3	Supplying, fitting and fixing Black Stone slab used in Kitchen slab, alcove, wardrobe etc. laid and jointed with necessary adhesive Cement mortar (1:2) including grinding or polishing as per direction of Engineer-in -Charge in Ground Floor. Slab thickness 20 to 25 mm.	1	Sqm.	643.00	643.00
5.4	Supplying, fitting and fixing 20 mm. to 37 mm. thick chunar / Mirzapur / Dholpur slab in floor set in 20 mm thick (avg.) cement mortar (1:4) bed and pointing with cement mortar (1:2) (cement 1, stone dust 2) with admixture of pigment matching the stone shades, rough chisel dressed all complete as per direction of Engg.-in-Charge (Using cement slurry for bedding @ 4.4kg/Sqm. land jointing @ 2.4 kg/Sqm.)	1	Sqm.	1,048.00	1,048.00
5.5	18 mm to 22 mm thick, kota stone slab set in 20 mm thick(avg) cement mortar (1:4) in floor, stair & lobby including pointing in cement slurry with admixture of pigment matching the stone shade, including grinding, rounding off edges & polishing as per direction of Engineer-in-charge to match with the existing work. [Slurry for bedding @ 4.4 kg/sq.m and pointing @ 2.0 kg/sq.m]	1	Sqm.	1,024.00	1,024.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.6	Supplying, fitting and fixing 18 mm. To 22 mm. Thick kota stone slab in wall, dado in 15 mm thick [avg] cement mortar (1:3) including making suitable arrangement to hold the stone properly by brass/copper hooks including pointing in cement mortar(1:2)(1 cement : 2 marble dust) with admixture of pigments matching the stone shade, including grinding and polishing all complete as per direction of Engineer-in-charge including cost of materials, labour scaffolding, staging, curing complete. [Using cement slurry for bedding @ 4.4 kg/sq.m and for jointing @ 1.8 kg/sq.m]	1	Sqm.	1,160.00	1,160.00
5.7	Supplying, fitting and fixing Marble slab/ tile of 15 to 18 mm thick in floor, lobby, dado, stair, landing & trades etc over 20 mm thick (Avg.) base of cement mortar (1:2) laid with white cement slurry @ 4.4 Kg/Sqm. before placing marble & jointed with white cement slurry @ 2.0 kg/Sqm with necessary pigments including grinding, rounding off edges and Granite/ mirror polishing as per direction of Engineer in charge. With Makrana plain pink/ Adranga pink/ Garbh Gulabi/ Udaypur pink/ Udaypur Green/ Black Bhaslana	1	Sqm.	1,467.00	1,467.00
5.8	Supplying, fitting & fixing granite tiles 10 mm to 12 mm thick in columns, wall, facia etc. with 15 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 tiles @ 4.4 kg/sq.m & white cement slurry for joint filling @ 1.8 kg/sq.m]	1	Sqm.	1,762.00	1,762.00
5.9	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.	1	Sqm.	2,936.00	2,936.00
5.10	Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10 mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc.				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.10.1	(A) Floor : With Sand Cement Mortar (1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 kg/Sq.m & joint filling using white cement slurry @ 0.20 kg/Sq.m.				
5.10.1.1	(a) Area of each tile upto 0.09 sqm (i) Coloured decorative	1	Sqm.	755.00	755.00
5.10.1.2	(b) Area of each tile above 0.09 sq m (i) Coloured decorative	1	Sqm.	920.00	920.00
5.10.2	(B) Wall : with Sand Cement Mortar (1:3) 15 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 kg/Sq.m & joint filling using white cement slurry @ 0.20 kg/Sq.m.				
5.10.2.1	(a) Area of each tile upto 0.09 sq m (i) Coloured decorative	1	Sqm.	757.00	757.00
5.10.2.2	(b) Area of each tile above 0.09 sq m (i) Coloured decorative	1	Sqm	1109.00	1,109.00
5.11	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 etc. set in 20 mm. sand cement mortar (1:4) and 2 mm thick cement slurry back side of tiles using cement @ 2.91 Kg/Sqmt. Or using polymerized adhesive (6 mm thick layer applied directly over finished artificial stone floor/ mosaic etc. with out any backing course) laid after application slurry using 1.75 Kg. of cement per Sqm. below mortar only, joins 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.				
5.11.1	With application slurry @ 1.75 kg/Sqm, 20mm sand cement mortar (1:4) & 2 mm thick cement slurry at back side of tiles, 0.2 kg/Sqm white cement for joint filling with pigment				
5.11.1.1	i) Deep colour & white	1	Sqm.	1,704.00	1,704.00
5.11.1.2	ii) Light colour	1	Sqm.	1,285.00	1,285.00
5.11.2	With polymerized Adhesive (6mm thick) & epoxy grouting materials for filling joints including spacer 2 mm (Applied directly over finished artificial stone floor/ mosaic etc.)				
5.11.2.1	i) Deep colour & white	1	Sqm.	1,785.00	1,785.00
5.11.2.2	ii) Light colour	1	Sqm.	1,366.00	1,366.00
5.12	Supplying, fitting & fixing Glass mosaic tiles at finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design, fixing in customize design as per direction of Engineer in- Charge. The glass mosaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Engineer-in-Charge.				
5.12.1	i) Plain Type/ Random Mix	1	Sqm.	1,302.00	1,302.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.12.2	ii) Gradation/ Progression Type	1	Sqm.	2,100.00	2,100.00
5.13	Supplying & laying 20 mm designer chequered tiles of any shade and of approved quality as per IS: 1237: 1980 laid in patterns as directed in pavement, footpath, stair case including necessary underlay 25 mm thick average cement mortar (1:3) complete in all respect with all labour and materials [using cement slurry @ 4.4 kg/Sq.m at back side of tiles.]	1	Sqm.	836.00	836.00
5.14	Supplying & laying of approved make and brand of scratch proof, flexible & homogeneous P.V.C. Vinyl flooring 2 mm thick conforming to IS:3462 - 1982 in required finish, fixed with synthetic acrylic adhesive after preparing the floor, levelling & smoothening when necessary with suitable putty, as per the design & instruction of the Engineer-in-charge. 2 mm thick.	1	Sqm.	510.00	510.00
5.15	50 mm thick interlocking designer concrete paver block M-30 grade for non-traffic zone, building premises, garden, parks, domestic drive as per IS: 15658-2006 (over 20-30 mm medium sand bed on 200mm thick bound granular / granular base course including cost of sand for sand bed but excluding cost of base course & subgrade preparation.)				
5.15.1	(i) Grey	1	Sqm	1,254.00	1,254.00
5.15.2	(ii) Coloured Decorative	1	Sqm	1,350.00	1,350.00
5.16	Laying old cement concrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost).	1	Sqm	286.60	286.60
5.17	Providing and fixing at or near ground level precast cement concrete in kerbs (size: 450 mm x 350 mm x width 150 mm at bottom with bevelled nosing at top) of cement concrete M20 Grade without reinforcement, fixing as per approved pattern and setting in position at site after preparing the bed grade and slopes by laying Cement concrete with jhama khoa (1:4:8) as per specification and direction of Engineer-in- Charge including filling of joints with 10 mm thick cement mortar (3:1) and back filling the vertical piece properly with earth duly compacted and curing the mortar joints for at least 3 days including cost and carriage of all materials complete. (Pre-cast Cement Concrete kerbstone shall be approved by Engineer-in-charge) including earthwork in excavation etc complete.	1	Rm	636.00	636.00
5.18	Labour for setting tiles in floor/ pavement in cement mortar (1:4) and joints finished with white cement.	1	Sqm.	101.00	101.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.19	Repairing cracks in floor with cement mortar (1:2) with necessary pigment to match with existing works, including prior cutting and cleaning the cracks as directed.	50	Mtr.	6.91	345.50
5.20	Washing and cleaning with oxalic acid powder using 33gms./Sqmtr.				
5.20.1	a) Marble floor / marble dado	10	Sqm.	6.96	69.60
5.20.2	b) Floor / dado other than marble.	10	Sqm.	5.52	55.20
5.21	Polishing only of old marble or terrazzo work with oxalic acid powder using 33 gms. / Sqm. by manual labour / machine where necessary.	5	Sqm.	38.00	190.00
5.22	Grinding to Marble/ mosaic floor including remaining stone, if necessary, after cutting with manual labour / machine, where necessary.	5	Sqm.	20.00	100.00
5.23	Resetting of old Kota/ Dungri/ Mirzapur/ sand stone slab in 20 mm thick (avg.) cement mortar (1:4) bed, joints finished with necessary pigments or with white cement including dismantling old mortar etc.	1	Sqm.	215.00	215.00
5.24	Taking out Mirzapur or glazed porcelain tiles carefully by chiselling from walls or floor including stacking serviceable material as directed.	1	Sqm.	106.00	106.00
5.25	Resetting old glazed porcelain/ ceramic tiles in 20 mm thick cement mortar (1:4) including 4 nos of key stone (10mm) fixed with adhesive of approved quality & 2 mm thick cement slurry using cement @ 2.91 Kg/Sqm at the back of tiles and finishing joints with white cement & colouring oxide (if required) to match the colour of tiles over application slurry @ 1.75 kg/sqm below cement mortar including dismantling the old mortar etc.	1	Sqm.	404.00	404.00
6.0	Roofing, Down pipes etc :::				
6.1	Asbestos corrugated (Trafford or similar approved quality) sheet (6 mm. thick) work (excluding the supporting framework) fitted & fixed with 9.5mm. dia J or L hook-bolt and nuts, limpet and bitumen washers and putty with 150mm. end lap & one corrugation minimum side lap complete (payment should be made on area of finished work) a) In roof.	1	Sqm.	471.00	471.00
6.2	Supplying, fitting & fixing Zn-Al alloy (55% Al & 45% Zn) coating of 150 grams per sq. metre (followed by colour coated on both side) steel sheet work having minimum yield strength of 550 Mpa of trapizoidal profile of approved make as per IS: 15965: 2012 and IS: 14246: 2013 (excluding the supporting frame work) fitted and fixed with 55 mm & 25 mm self tapping screw, EPDM Washer 16 mm dia & 3 mm th. washer etc. complete with 150 mm end lap and one corrugation minimum side lap. DURASHINE Roof colour coated sheet of Tata Blue Scope Steel Brand 0.5 mm thick sheet (Payment to be made on area of finished work).	1	Sqm.	787.00	787.00
6.3	Galvanised iron sheet ridging fitted with necessary bolts, screws, washers etc complete. (225mm end lapping) 300 mm lapping each way with 0.63 mm sheet.	1	Mtr	380.00	380.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.4	Galvanised iron sheet eaves gutter fitted and fixed with necessary 50 mm X 6 mm M.S flat bar clamps bent to design, bolts, nuts, washers etc. complete. Eaves gutter made of 0.63 mm. sheets.(300mm End lapping) 225 mm	1	Mtr	342.00	342.00
6.5	Supplying, fitting and fixing glass reinforced polyester translucent fiber glass sheet to match with GCI Corrugation as per IS : 12866-1989 in roof fitted and fixed with 10 mm dia "J" or "L" hook, bolts and nuts, limpet and bitumen washers and putty with 150 mm end lap and one corrugation minimum side lap complete. 1.6 mm +/- 0.2 mm thick sheet. (3.25 kg/sq.m) Coloured other than natural white or tinted blue.	1	Sqm.	768.00	768.00
6.6	Supplying, fitting and fixing glass reinforced polyester translucent ridging 450 mm long each way as per IS 2866 - 1989 fitted and fixed with bolts J hooked screws and bitumen washers complete. 1.6mm +/- 0.2 mm thick sheet. Coloured other than natural white or tinted blue.	1	Mtr	609.00	609.00
6.7	Supplying, fitting & fixing polycarbonate sheet of approved make & brand conforming to IS: 14443-1997 and having 50 micron UV protection layer under co-extrusion technology, Fire rating being B-s1 as per EN13501-1 certification, fitted and fixed with 60mm wide aluminium channel section top and bottom member in dry-glaze sandwich system, (unit wt. of top and bottom members: 0.375 kg/m & 0.69 kg/m) of approved brand and profile, EPDM quality rubber gaskets, anti dust tape, end closer "C" channel and 75 mm long Self tapping screw being drilled through the centre leg of the bottom section with nuts placed at 300 mm apart without anyway puncturing the polycarbonate sheet, EPDM Washer 16 mm dia & 3 mm thick washer etc complete strictly as per manufacturers specification and direction of Engineer-in- Charge. (Payment to be made on area of finished work) . In Roof:- Natural/ Blue/Green/Bronze /Opal/Metallic grey colour				
6.7.1	With 2 wall 6 mm overall thickness (wt.1.30kg/sqm, Ugvalue being 3.7 W/m2K, Min. cold bending radius of 900 mm)	1	Sqm	1,102.00	1,102.00
6.7.2	With 2 wall 8 mm overall thickness (wt.1.50kg/sqm, Ugvalue being 3.3 W/m2K, Min. cold bending radius of 1200 mm)	1	Sqm	1,326.00	1,326.00
6.7.3	With 2 wall 10 mm overall thickness (wt.1.70kg/sqm, Ugvalue being 3.1 W/m2K, Min. cold bending radius of 1200 mm)	1	Sqm	1,544.00	1,544.00
6.7.4	With 4 wall 8mm overall thickness (wt.1.60kg/sqm, Ugvalue being 2.76 W/m2K, Min. cold bending radius of 1200 mm)	1	Sqm	1,551.00	1,551.00
6.7.5	With 4 wall 10 mm overall thickness (wt.1.75kg/sqm, Ugvalue being 2.5 W/m2K, Min. cold bending radius of 1500 mm)	1	Sqm	1,829.00	1,829.00
6.8	Galvanised or painted wind tie made of M.S. flats, fitted and fixed complete including cost of necessary fitting, M.S.flat 40mm x 6mm.	2	Mtr.	119.00	238.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.9	Taking out wind-tie from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within the compound and stacking.	2	Mtr.	15.00	30.00
6.10	Taking out old damaged tarfelt from the roof, parapet etc. preparing the roof surfaces by removing all spoils, blisters, moss etc. from the working site and disposal of the same beyond the compound and cleaning the site in all respect as per direction of Engineer-in-Charge.	10	Sqm	12.00	120.00
6.11	<p>Supplying & laying 3mm thick pre-fabricated plastomeric water proofing membrane conforming to EN 12311-1 & ASTM D 5147, manufactured with atactic poly propylene (APP) modified premium grade asphalt , specially reinforced with non-woven polyester core with polyester reinforcement @160 gms per sqm & both faces covered with thermo-fusible polyethylene film /MineraL on top face over a coat of primer @ 0.40 lit/sqm of manufacturer's specification on smooth, clean dry surface prepared wherever required including repairing the old surface with cement mortar (1:2) admixing Sika Latex etc. Lap joint shall be provided of 75 mm in longitudinal & 100 mm in transverse direction and fused using LPG/ Propane torch employing extra care ensuring full bondage,</p> <p>complete removal of entrapped air and sealing edges into grooves in appropriate manner as per direction of Engineer in-charge all complete including materials,labour and applicable taxes. (Payment shall be made on the basis of finished surface area)</p> <p>Membrane Property: Softening Point > 150 deg C, Cold Flexibility < -6 deg C, Tensile Strength, N/cm : 600 (longitudinal), 450 (transverse), Tearing Strength, N: 300 (longitudinal), 200 (transverse) Make : Sika India Pvt Ltd or approved make.</p>	1	Sq.m	407.00	407.00
6.12	Repairs to roof cracks with sand and cement mortar (1:4) including cutting groves and cleaning cracks and grouting the cracks with net cement before repairs (cement 0.63 kg/m).	10	Mtr.	14.00	140.00
6.13	<p>Fitting and fixing old pieces of asbestos, G.C.I. or C.I. sheets or plain sheets including closing old holes with washers and sheet-bolts and nuts, etc. and including fixing the same to supporting frame with necessary hook-bolts, washers, putty etc. (excluding cost of sheets). (Payment to be made on area of finished work.)</p> <p>(ii) With all new fittings including the cost thereof. (a) In roof</p>	2	sqm	104.00	208.00
6.14	Renewing galvanised J or L hook-bolt with nut and with necessary limpet and bitumen washers, putty etc. fitted & fixed completed (total length of bolt upto 225mm). 8mm. dia bolt.	5	Each	27.00	135.00
6.15	Removing chockage of rain water pipes with split bamboo.	50	Mtr.	7.51	375.50

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.16	Supplying, fitting & fixing UPVC pipes A-Type and fittings conforming to IS -13592-1992 with all necessary clamps nails, including making holes in walls, floor etc. cutting trenches in any soil through masonry concrete structures etc if necessary and mending good damages including joining with jointing materials (Spun Yarn, Valamoid/Bitumen/M-Seal etc.)				
6.16.1	UPVC Pipes : 75 mm Dia	3	Mtr.	188.00	564.00
6.16.2	UPVC Pipes : 110 mm Dia	3	Mtr.	251.00	753.00
6.16.3	UPVC Fittings: Plain tee 75 mm. Dia.	2	Nos	102.00	204.00
6.16.4	UPVC Fittings: Plain tee 110 mm. Dia.	2	Nos	172.00	344.00
6.16.5	UPVC Fittings : Plain Y 75 mm. Dia.	1	Nos	125.00	125.00
6.16.6	UPVC Fittings : Plain Y 110 mm. Dia.	1	Nos	223.00	223.00
6.16.7	UPVC Fittings : Bend 87.5 degree, 75 mm Dia	2	Nos	84.00	168.00
6.16.8	UPVC Fittings : Bend 87.5 degree, 110 mm Dia	2	Nos	140.00	280.00
6.16.9	UPVC Fittings : Shoe : 75 mm. dia	1	Nos	78.00	78.00
6.16.10	UPVC Fittings : Shoe : 110 mm. dia	1	Nos	111.00	111.00
7.0	Structural Steel, Grills, Gates etc. :::				
7.1	<p>M.S. structural works with hollow sections (TATA make square or rectangular shape) conforming to IS: 806-1957 & IS:1161-1958) connected to one another with bracket, gusset, cleat as per design, drawing & direction of Engineer-in-Charge complete including cutting to requisite shape & size, fabrication including metal arc welding conforming to IS: 816-1956 & IS: 9595 using electrodes of approved make and brand conforming to IS:814- 1957, haulage, hoisting and erection all complete.</p> <p>The rate includes the cost of all M.S. Hollow section, all consumables such as electrodes, gas and hire charges of all tools and plants and labour required for execution and all incidental chages (such as electricity, labour insurance) etc. complete.</p> <p>Payment to be made on the basis of calculated weight of structural memebtrs of MS Holow Section as specified in relevent IS code in finished work. Payment for gusset, bracket, cleat may be made by adding the actual weight of such items with weight of finished structural members. The rates are considered for a hight of erection 8 m. / 2nd floor level from the ground. Add 1.5 % extra over the rate for each additional floor or 4m. beyond the initial 8 m. or part thereof. For any kind of Structural Works like trusses, gates etc.</p>	0.05	MT.	74,900.00	3,745.00
7.2	M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in any floor. (The weight of grill per sq.m. will be determined by taking the physical weight of fabricated grill and dividing the same by covered area of the same.)				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
7.2.1	i) Grill weighing above 10 Kg./sq.mtr and up to 16 Kg./sq.mtr.	0.1	Qntl.	7,238.00	723.80
7.2.2	ii) Grill weighing above 16 Kg./sq.mtr and above	0.1	Qntl.	7,046.00	704.60
7.3	M.S. gate of Jail type as per approved design made of strong M.S. frame work, intermediate stiffeners and round / square bars or angles. M.S. sheet (not less than 14 gauge) gussets, cleats etc. including necessary riveting, bolting, welding, locking and hanging arrangements, fitting and fixing complete as per direction of the Engineer-in -charge.	0.1	Qntl.	7,566.00	756.60
7.4	Supplying 1.5mm thick M.S. sheet fitted and fixed on one or both faces of M.S./ W.I. gate etc. with point welding at not more than 150mm apart complete in all respect as per design including cost of all labour and materials.	1	Sqm.	977.00	977.00
7.5	Supply, fitting & fixing of collapsible gate with 40mm x 40mm x 6mm tee as top and bottom guide rail 20mm x 10mm x 2mm vertical channels 100 mm apart in full stretched position 20mm x 5 mm MS flat as collapsible gate bracings properly riveted and washered including 38mm steel rollers including locking arrangements, fitted and fixed in position with lugs set in cement concrete and including cutting necessary holes, chasing etc. in walls, floors etc. and making good damage complete.	1	Sqm.	3,402.00	3,402.00
7.6	Supply, fitting & fixing steel rolling shutter profile type with 18 BG approve type steel latch section 75mm wide, fitted with coil wire spring to necessitate the fitting of required nos of C.I. pulleys on heave type solid drawn seamless steel tube complete with locking arrangements both inside and outside specially builtup side guide channels including providing a hood for the steel rolling shutter in the room, painting two coats of approved aluminium paint over a coat of red lead primer complete. (Measurement will be made on the area of opening covered by the rolling shutter corrected upto 2 decimal.)	1	Sqm.	2,170.00	2,170.00
7.7	Supplying fitting and fixing steel rolling grills link type, shutter with 18 B.G .of approved type steel to the section 75mm wide, fitted with coil wire spring to necessiate the fitting of required Nos. of C.I. Pulleys on heavy type solid drawn seamless steel tube complete with locking arrangements both inside and outside specially builtup side guide channels including providing a hood for the steel rolling shutter in the room, painting two coats of approved aluminium paint over a coat of red lead primer complete. (Measurement will be made on the area of opening covered by the rolling shutter corrected upto 2 decimal.)	1	Sqm.	2,833.00	2,833.00
7.8	Repairing collapsible gate by cutting out all rivets as necessary re-assembling all members including welding pieces of channels, straightening bent bars and riveting with new rivets and fitting in position and painting two coats	2	Sqm.	379.00	758.00
7.9	Greasing, oiling, cleaning collapsible gate and repairs to locking arrangements.	5	Sqm.	17.00	85.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
7.10	Greasing, oiling, cleaning rolling shutters excluding repairs to inside locks.	5	Sqm.	12.00	60.00
7.11	Labour for taking out rolling shutter (only shutter portion) dismantling by parts for repair or (replacement of damaged parts only), rehangng and refitting the same in position after necessary repairs (excluding the cost of supply of new parts).	2	Sqm.	283.00	566.00
7.12	Renewing seam pipe for rolling shutter as per existing size and shape fitting, fixing complete	3	Mtr.	210.00	630.00
7.13	Renewing side split pin for seam pipe for rolling shutter.	2	Each	26.00	52.00
7.14	Oiling and greasing of rolling shutter and repair to in side lock.	5	Sqm.	73.00	365.00
7.15	Renewing profile of rolling shutter including fitting fixing complete as per existing size and shape.	6	Mtr.	54.00	324.00
7.16	Renewing spring of rolling shutter as per existing size and shape including fitting fixing complete	1	Each	609.00	609.00
7.17	Renewing steel plated or oxidized casement stay or peg stay of steel window frames including painting two coats approved paint complete.	5	Each	70.00	350.00
7.18	Renewing one point steel (oxidised) handle of steel door and windows as directed including painting complete.	5	Each	61.00	305.00
7.19	Repairing steel shutter with new rivets including taking out and re-fixing, adjusting welding, cleaning, cutting holes mending good damage to match with the existing one.	1	Sqm.	401.00	401.00
7.20	Renewing hinge of steel shutter including taking out old one by cutting and fixing new hinges by welding and mending good damages complete.	1	Each	190.00	190.00
7.21	Providing & fixing steel peg stay 300 mm long including fitting and fixing.	10	Each	25.00	250.00
7.21	Welding in M.S. structural work with gas or electric				
7.21.1	(a) Tack weld	20	Point	9.00	180.00
7.21.2	(b) Continuous weld	10	Cm run	9.00	90.00
8.0	Painting, White washing, Polishing etc. :::				
8.1	White washing including cleaning and smoothening surface thoroughly (5 parts of stone lime and 1 part of shell lime should be used in the finishing coat) all floors. Two coats or more (to be done on specific instruction).	10	Sqm.	18.14	181.40
8.2	Applying Decorative cement based paint of approved quality after preparing bed including scrapping the surface thoroughly on plastered or concreted surface (manufacturers specifications to be followed) at any floor.				
8.2.1	i) One coat	10	Sqm.	31.00	310.00
8.2.2	ii) Two Coat	10	Sqm.	49.00	490.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
8.3	Acrylic Distemper to interior wall, ceiling with a coat of solvent based interior grade acrylic primer (as per manufacturer's specification) including cleaning and smoothening of surface. Two Coats	20	Sqm.	70.00	1,400.00
8.4	Applying Water based 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- One Coat.	200	Sqm.	30.80	6,160.00
8.5	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 EIC).				
8.5.1	i) One coat Standard quality	50	Sqm.	37.00	1,850.00
8.5.2	ii) Two Coats Standard quality (as approved by the Engineer-in-Charge)	140	Sqm.	62.00	8,680.00
8.5.3	iii) Two Coats (Luxury quality) (Berger make: Silk Glamour/ Silk Luxury Emulsion; Asian Paints: Royale Luxury Emulsion/ Royale Shyne Luxury Emulsion/ Royale Matt; AKZONOBEL: Velvet Touch Diamond Glow) as approved by E-I-Charge prior application.	10	Sqm.	70.00	700.00
8.6	Applying Exterior grade Acrylic primer of approved 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). (a) One Coat & more	50	Sqm.	31.40	1,570.00
8.7	Protective and Decorative Acrylic exterior emulsion paint (weather coat) of approved quality, as per manufacturer's specification and as per direction of EIC 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.				
8.7.1	Two coats or more - Normal Acrylic Emulsion	40	Sqm.	67.00	2,680.00
8.7.2	Two coats or more - Premium 100% Acrylic Emulsion (Weathershield Max of AKZONOBEL or approved make)	10	Sqm.	84.00	840.00
8.8	Priming one coat one timber or plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	50	Sqm.	38.00	1,900.00
8.9	Priming one coat one timber or plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	50	Sqm.	29.00	1,450.00
8.10	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary.				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
8.10.1	a) Single coats (with any shade except white) with high gloss on timber or plastered surface.	20	Sqm.	54.00	1,080.00
8.10.2	b) Two coats (with any shade except white) with high gloss on timber or plastered surface.	50	Sqm.	81.00	4,050.00
8.10.3	c) Single coats (with any shade except white) with high gloss on steel or other metal surface.	20	Sqm.	51.00	1,020.00
8.10.4	d) Two coats (with any shade except white) with high gloss on steel or other metal surface.	50	Sqm.	79.00	3,950.00
8.11	Painting with superior quality aluminium paint of approved make and brand including smoothing surface by sand papering etc. on metal surface.				
8.11.1	Single coat	10	Sqm	34.00	340.00
8.11.2	Two Coats	10	Sqm.	57.00	570.00
8.12	Painting with ready mixed red lead paint of approved make and brand - One coat.	20	Sqm.	31.00	620.00
8.13	Painting with ready mixed Black Japan of approved make and brand including smoothing surface - Two coats.	10	Sqm.	56.00	560.00
8.14	French polishing to woodwork including preparing surface high gloss on old polished surface including complete removal of old polish.	1	Sqm.	538.00	538.00
8.15	Ready mix wax polishing to wood work including preparing surface on old wax polished surface including removal of old polish.	5	Sqm.	115.00	575.00
8.16	Rendering the surface of walls and ceiling with white cement based wall putty of approved make and brand (1.5 mm thick).	10	Sqm	110.00	1,100.00
8.17	Cleaning the walls and ceiling by scraping, sand papering and smoothening down the surface including putting.	50	Sqm	17.00	850.00
8.18	Removing old scales, blisters etc. of interior surface of walls, ceiling by scraping etc. and preparing smooth and even surface with rendering or cement mortar (1:2) (as necessary), to make the surface suitable for receiving distemper/ acrylic emulsion etc.. (Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge)	50	Sqm	10.17	508.50
8.19	Scraping of moss, blister etc. thoroughly from exterior surface of walls necessitating the use of scraper, wire brush etc. (Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge).	50	Sqm	7.00	350.00
8.20	Scraping and removing greasy soot from walls or ceiling of kitchen or similar smoke affected rooms and preparing the surface.	50	Sqm	11.00	550.00
8.21	Cement washing including cleaning and smoothening surface thoroughly (cement to be used @25 kg./100 sq.m. of surface for two coat) Two coats or more	50	Sqm	14.24	712.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
8.22	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of face, etc. complete.				
8.22.1	On steel surface (old/new)	1	Sq.m	167.75	167.75
8.22.2	On concrete surface (old/new)	1	Sq.m	167.40	167.40
9.0	Carpenter's Work :::				
9.1	Wood work in door and window frame (Local sal) fitted and fixed in position complete including a protective coat of painting at the contact surface of the frame excluding cost of concrete, Iron Butt Hinges and M.S. clamps. Sal : Local.	0.05	Cu.M	77,671.00	3,883.55
9.2	Panel shutters of door and window, as per design (each panel consisting of single plank without joint), including fitting and fixing the same in position but excluding the cost of hinge and other fittings. (In case of non-supply of single plank, penal rate of reduction of 20% will be made) 35 mm thick shutters with 19 mm thick panel of size 30 to 45 cm. of ordinary Teak Wood.				
9.2.1	Ordinary teak wood	1	Sqm.	4,220.00	4,220.00
9.2.2	Sishu, Gamar, champ, badam, bhola, mogra, hallak	1	Sqm.	2,948.00	2,948.00
9.3	Z-batten shutter of door and window as per design having tongued and groove-half lap jointed as per direction of the Engineer-in-charge including fitting and fixing shutter in position, but excluding the cost of hinges and other fittings in ground floor. Shutter with 25mm thick planks, 19mm thick battens. Sishu, Gamar, champ, badam, bhola, mogra, hallak.	1	Sqm	2,750.00	2,750.00
9.4	Supplying solid flush type doors of commercial quality, the timber frame consisting of top and bottom rails and side styles of well seasoned timber 65 mm wide each and the entire frame fitted with 37.5 mm 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 ground floor. 35 mm thick shutters (single leaf)	1	Sqm.	2,659.00	2,659.00
9.5	Supplying, fitting and fixing fiber reinforced polymer (FRP) Composite door frame as per approved section with glass fiber reinforced plastic moulded skins and a special sandwich core, so as to impart monolithic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS: 4020 door testing performance criteria. 66 mm x 70 mm	5	Mtr	446.00	2,230.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.6	Supplying, fitting & fixing fiber reinforced polymer (FRP) composite door shutters as per approved design with glass fiber reinforced plastic moulded skins and a special sandwich core, so as to impart monolithic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS:4020 door testing performance criteria In Ground Floor. 25 mm thick.	2	Sqm	2,581.00	5,162.00
9.7	Supplying fitting and fixing in position approved P.V.C. door frame (Matt finish) made of extruded P.V.C. multichamber hollow section having dimensions 60mm x 50mm x 2mm (+/-0.2mm), horizontal section will be joined with vertical section by galvanised steel screws after inserting two number steel brackets as reinforcement making suitable space for placing hinges, one steel tube 40mm x 20mm x 1.20 mm will be inserted on one full vertical side of the frame (hinge side) as reinforcement, the frame will then be fixed in the opening with the help of P.V.C. expandable fastner/wooden gutties and galvanised steel screws including cost of all materials and labour, hire charges of tools and appliances, carriage of all materials, taxes and all other incidental charges complete.	5	Mtr	279.00	1,395.00
9.8	Supplying fitting and fixing P.V.C. door shutter (30mm thick) of approved quality & shade in position, the style & rail of the P.V.C. door shutter will be made of rigid P.V.C. multicavity hollow chamber of 59 mm x30 mm section with 2.0 mm (+/-0.2 mm) wall thickness.Horizontal & vertical section shall be fixed to each other by self tapping screws and 1 solid polymeric or M.S. galvanised tubular 'L' shaped bracket 100mm x 200mm in each corner of the shutter frame for placing hinges. Polymer based multicavity hollow section of 120 mm x30mm with 2.0 mm (+/- 0.2 mm) wall thickness will be fitted in the middle, reinforced by solid polymer bar of 200 mm long at both ends and screws from both sides as lock rail. The section frame will then be fitted in by PVC panels of size 100 mmx25 mm with wall thickness of 1.2 mm (+/- 0.2 mm) and 2 nos. of 6 mm dia bright rod will be inserted horizontally with both side check and nut system and stretches where fixing of hinges / hasp bolt / tower bolt / door ring are required to be strong enough to with stand wear and tear. The rate is inclusive of cost of all materials, labour, and hire of tools and plants and appliances/c carriage of all materials taxes and all other incidental charges complete.	1.5	Sqm	2,127.00	3,190.50
9.9	Supplying, fitting and fixing M.S. clamp for door and window frame made of flat bent bar, end bifurcated with necessary screws etc in cement concrete (1:2:4) including cutting of brick work/ concrete work as per direction. (Cost of concrete will be paid saperately) 40 mm x 6 mm x 200 mm long	6	Each	25.00	150.00
9.10	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete.				
9.10.1	75 mm x 47 mm x1.80 mm	3	Each	50.00	150.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.10.2	100 mm x 58 mm x 1.90mm	3	Each	65.90	197.70
9.11	Iron hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm dia rod with centre bolt and round fitting - 300 mm long.	2	Each	166.00	332.00
9.12	Brass hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm dia rod with centre bolt and round fitting - 300 mm long.	1	Each	657.00	657.00
9.13	Supplying, fitting and fixing door stopper (Steel body)	5	Each	67.00	335.00
9.14	Supplying, fitting and fixing 4mm thick acrylic ornamental finger plate made of transparent acrylic sheet including providing holes of knobs and keys as per existing shutter and chamfering the edges of acrylic sheet.	1	Sqm	699.00	699.00
9.15	Supplying 'Godrej' mortice lock chromium plated with latch and keys 4 levers, including fitting and fixing complete	1	Each	1,081.00	1,081.00
9.16	Supplying, fitting and fixing Godrej Multi Lock or equivalent	1	Each	136.00	136.00
9.17	Hydraulic door closer of approved quality as per ISI standard fitted and fixed complete. Heavy type (I.S.I. Size 3) Godrej make or approved equivalent.	1	Each	2,064.00	2,064.00
9.18	Taking out and re-fixing after oiling and cleaning including adjusting spring of different types of automatic door closer with necessary screw complete.	5	Each	66.00	330.00
9.19	Repairs to automatic door closer including replacement of damaged main spring, oiling and adjusting as necessary including taking out and refitting the same.	2	Each	318.00	636.00
9.20	Labour for taking out door and window frame including shutter for repair or replacement of different parts of the frame & refixing the same including mending good all damages complete. (Concrete and brick work for mending damage will be paid separately) Area upto 2.5 Sqm.	5	Sqm	119.00	595.00
9.21	Taking out shutter of door and window, dismantling by parts (for repair or replacement of damaged parts), reassembling and refitting and rehang same with old fittings but with new screws as necessary.	5	Sqm	126.00	630.00
9.22	Taking out door and window shutters and rehang the same with old fittings but with new iron screws.	5	Sqm	78.00	390.00
9.23	Supplying bubble free float glass of approved make and brand conforming to IS : 2835-1987 and fixed with nails, putty etc complete.				
9.23.1	4 mm thick coloured / tinted / smoke glass.	5	Sqm	468.00	2,340.00
9.23.2	5 mm thick coloured / tinted / smoke glass.	2	Sqm	585.00	1,170.00
9.23.3	6 mm thick coloured / tinted / smoke glass.	1	Sqm	661.00	661.00
9.24	Renewing worn out putty of glass panes.				
9.24.1	Panes not exceeding 0.2 Sqmtr.	10	Each	33.00	330.00
9.24.2	Panes exceeding 0.2 Sqmtr. But not exceeding 0.5 Sqmtr.	10	Each	51.00	510.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.25	Cleaning and removing paint mark from glass pane with spirit and removing strains etc.	25	Sqm.	17.00	425.00
9.26	Taking out existing partition / ceiling of particle board, Masonic board, ply board, soft board etc. of any thickness and re-fixing same in new position with necessary clamps making holes in walls floor, roof and mending damages in old and new one in cement concrete (4:2:1) with stone chips and cement plaster (1:4) and lime washing three coats complete.	1	Sqm.	55.00	55.00
9.27	<p>Providing and fixing of false ceiling with 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 / 600 mm long and Wall Angle. The Wall Angle shall be fixed on PVC Dash Fasteners on the perimeter of the wall by steel screws with distance 300mm c/c. The Main Runners to be placed @ 1200 mm. The Cross Tee 1200mm will be inserted in the pre-cut slots of Main Runner at a regular interval of 600 mm to form a modular grid of 1200mm X 600mm.</p> <p>Additional Cross Tees of 600 mm shall be placed perpendicular to the Cross Tee 1200 mm long to finally form a grid of 600 mm X 600 mm. Grid of module size 600 mm X 600 mm shall be supported by 6 mm dia G.I. wire from purlins / soffit. 6 mm thick High Pressure Steam Cured Non Asbestos Fibre Cement Standard Ceiling Board (Density > 1300 Kg/m³) of size 595 mm X 595 mm, conforming IS 14862 & Type B Category III of ISO 8336, tested as per AS-1530 part 3 & BS-476 Part 4,5,6,7 & 8, should be placed in the Grid module to form a False Ceiling. All complete as per the drawing & directions of Engineer-in-charge.</p> <p>False Ceiling (with 6mm thick Fibre Cement Designer Board and E-Grid T-2430).</p>	1	Sqm	591.00	591.00
9.28	Providing and fixing of false ceiling with powder coated exposed G.I. Grid suspension system (E-Grid U-1520 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200 mm c/c) consisting of Main Runner 3600 mm long, Cross Tee 1200 mm / 600 mm long and wall angle. The Wall Angle shall be fixed on PVC Dash Fasteners on the perimeter of the wall by steel screws with distance 300 mm c/c. The Main Runners to be placed @ 1200 mm. The Cross Tee 1200 mm will be inserted in the pre-cut slots of Main Runner at a regular interval of 600 mm to form a modular grid of 1200 mm x 600 mm.	0	Sqm.	1,357.00	0.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
	<p>Additional Cross Tees of 600 mm shall be placed perpendicular to the Cross Tee 1200 mm long to finally form a grid of 600 mm X 600 mm. Grid of module size 600 mm X 600 mm shall be supported by 6 mm dia G.I. wire from purlins / soffit. 15mm thick OW Acoustic Board (Mineral Fiber Acoustic Ceiling Tiles) of approved pattern and size 595mm X 595mm with NRC value > 0.65 should be placed in the Grid module to form a False Ceiling. All complete as per the drawing & directions of Engineer-in-charge.</p> <p>a) Acoustic False Ceiling (with 15 mm thick OW Acoustic Board and E-Grid U-1520). At any Floor</p>				
9.29	<p>M.F. suspended ceiling made with 12.5 mm thick Gypsum plaster board including G.I. perimeter channel of 0.55 mm flush (having two flanges 20 mm and 30 mm respectively and web 27 mm) along with perimeter of ceiling with G.I. intermediate channel of 0.9 mm thick size 45 mmx15mm placed at 750 mm c/c with G.I. ceiling angle of size 25 mmx10mmx0.55 mm thick fixed to the ceiling with G.I. Cleat and steel expansion fastener ceiling section 0.55 mm thick of size 51.50 mmx26mm fixed to the intermediate channels with the help of connecting clip and in the direction of perpendicular to the intermediate channel of 300 mm c/c</p> <p>12.5 mm thick Gypsum plastered board are to be fixed under ceiling section as above by machine screws. The boards are to be joined and finished with jointing compound, paper tape and application of top coat etc. as per the direction of Engineer-in-charge. (The rate includes of cost of all materials including taxes, cost of accessories, fittings and fixtures, scaffolding and labour charges etc. complete)</p>	1	Sqm.	1,159.00	1,159.00
9.30	<p>Ceiling of soft-insulation boards (12mm thick) as per design fitted and fixed complete (excluding the support framework but including necessary wood battens of size 40 mmx25 mm). Sal : Local</p>	1	Sqm.	486.00	486.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.31	Providing P.V.C. False Ceiling made with framework of steel tube of 40mm x 20mm of not less than 18 gauge,the long and cross section will be welded with each other 1000mm to 1200mm apart the entire framework will be fixed in wall using rawlplug or gutties or screws etc. and suspended from ceiling with M.S flat 19mmx3mm as necessary,the entire frame will be painted with red oxide. PRINTED LAMINATED P.V.C Section 150mm x 12mmx 1.00mm (+/- 0.01mm) of approved quality and colour will be fixed on the frame so that the entire framework will not be visible from below P.V.C Section will be fixed with the frame with the help of self tapping steel screws including all materials and labour charges including fitting,fixing the same and hoisting including mending the damages in all respect and cost of paint as required as per direction of Engineer-in-Charge .	0	Sqm	1,394.00	0.00
10.0	Aluminium Work :::				
10.1	Supplying concealed type heavy duty PVC headed aluminium tower bolt for double leaf doors as per approved make and brand as per direction of Engineer-in-charge.				
10.1.1	300 mm long	1	Each	74.00	74.00
10.1.2	450 mm long	1	Each	164.00	164.00
10.2	Anodized aluminium barrel / tower / socket bolt (full covered) of approved quality manufactured from extruded section conforming to IS:204/74 fitted & fixed with cadmium plated screw.				
10.2.1	100mm long x 10mm dia bolt.	5	Each	53.00	265.00
10.2.2	150mm x 10mm dia bolt.	5	Each	63.00	315.00
10.2.3	300mm long x 12mm dia bolt.	2	Each	151.00	302.00
10.3	Anodized aluminium aldrip / sliding bolts of approved quality manufactured from extruded section conforming to IS specification) (IS : 2681 / 66) fitted and fixed complete.				
10.3.1	300mm x 16mm dia bolt.	2	Each	231.00	462.00
10.4	Anodised aluminium D-type handle of approved quality manufactured from extruded section conforming to I.S. Specification (I.S. 230/72) fitted and fixed complete. With continuous base plate (Hexagonal/ Round rod)				
10.4.1	i) 100 mm grip x 10 mm dia rod.	4	Each	69.00	276.00
10.4.2	ii) 150 mm grip x 12 mm dia rod.	4	Each	111.00	444.00
10.5	Supplying, fitting and fixing heavy duty hydraulic (oil check) double action floor door spring along with top pin/set of pivots conforming to IS: 6315, with brass shoe, brass top centre aluminium top cover etc complete set as per direction of Engineer in charge. Make: Godrej or approved equivalent.	0	Each Set	3573.00	0.00
10.6	Supplying heavy duty top pin/set of pivots of local make and approved by the Engineer-in-charge. (This item to be provided where floor spring not used)	2	Pair	297.00	594.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
10.7	Supplying EPDM gasket of approved make and brand as per direction of Engineer in charge.				
10.7.1	EPDM/ weather gasket for outer frame and mullion	30	Mtr	15.00	450.00
10.7.2	Weather gasket/ wool pile for door vertical.	20	Mtr	19.00	380.00
10.8	Supplying 4 lever mortice lock of any approved make and brand as per direction of the Engineer-in-charge. 150 mm	1	Each	378.00	378.00
10.9	Supplying aluminium casted body hydraulic door closer as per ISI	1	Each	635.00	635.00
10.10	Supplying 250 mm long Heavy Type Aluminium window Peg stay	5	Each	55.00	275.00
10.11	Supplying Heavy duty aluminium handle (EBCO type) natural white	5	Each	96.00	480.00
10.12	Supplying Aluminium casted body Butt Hinge (KOBRA type) (Natural white).	5	Each Set	56.00	280.00
10.13	Supplying stainless steel frictional hinge for casement window as per approved brand as directed by Engineer-in-charge.				
10.13.1	250mm long	1	Pair	302.00	302.00
10.13.2	300mm long	1	Pair	332.00	332.00
10.14	Removing aluminium door and window frame/ shutters positioning & re-fixing the same after repairing supply of necessary materials excluding aluminium section, glass, floor spring, rubber, felt, fitting & fixtures etc.	5	Sqm.	82.00	410.00
10.15	Repairing of shutters & outer frames of aluminium windows (excluding glass and gasket) after removing the existing damaged shutters and re-fixing the same in position after cutting (if necessary).	1	Each	275.00	275.00
10.16	Supplying PVC rollers for sliding windows as per direction of Engineer in charge	10	Each	14.00	140.00
10.17	Supplying anodized aluminium extruded section box hinge for casement window as per approved brand and make directed by Engineer-in-charge (natural white).	5	Each	44.00	220.00
10.18	Supplying & fitting Zinc powered coated star lock (Natural White)	5	Each	40.00	200.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
10.19	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 to be paid for separately) :				
10.19.1	For fixed portion Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	2	Kg	374.80	749.60
10.19.2	For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	1	Kg	403.40	403.40
10.20	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing & fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
10.20.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	2	Kg	453.90	907.80
10.20.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	1	Kg	483.00	483.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
11.0	Miscellaneous Works :::				
11.1	Supplying at site or stackyard or as directed PCC (1:2:4) Fencing Post 215 cm x 150 mm x 150 mm section at bottom, 100 mm x 100 mm section at top with T-Base 300 mm x 150 mm x 100 mm, having 4 nos 6 mm dia vertical M.s. reinforcement and 6 mm dia binders @ 200 mm centres, finished smooth etc. complete.	1	Each	451.00	451.00
11.2	Supply, fitting & fixing G.I. chain link fencing 75 mm x 75 mm x mesh 12 SWG to the RCC posts, wooden posts or iron posts with galvanized hooks or staples etc. complete as per direction.	1	Sqm.	169.00	169.00
11.3	Supplying, fitting and fixing in position fibre glass panes of approved quality with resin, nail, clip etc. as per IS:12866-1989. (In all floors for internal wall & upto 6 m height for external wall)				
11.3.1	1.2 mm thick (1.85 Kg/Sq.m)	1	Sqm.	527.00	527.00
11.3.2	1.6 mm thick (2.5 Kg/Sq.m)	1	Sqm.	693.00	693.00
11.3.3	2.0 mm thick (3.36 Kg/Sq.m)	1	Sqm.	939.00	939.00
11.3.4	3.0 mm thick (5.10 Kg/Sq.m)	0	Sqm.	1,381.00	0.00
11.3.5	4.0 mm thick (6.72 Kg/Sq.m)	0	Sqm.	1,719.00	0.00
11.3.6	6.0 mm thick (10.0 Kg/Sq.m)	0	Sqm.	2,583.00	0.00
11.4	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.	25	Mtr.	13.92	348.00
11.5	Providing and applying of Silicon Sealant in construction joint, window glass, polycarbonate sheets to make joints water tight, after racking out of joints/ cracks wherever necessary & thorough cleaning at different levels.	2	Cartridge	275.00	550.00
11.6	Extra rate for using water proofing and plasticising admixture @ 0.2% by weight of cement (or at manufacturer's specified rate) for concrete of various grades or plaster.	5	Kg.	119.00	595.00
11.7	Labour rates per day.				
11.7.1	a) Skilled (Mason/ Carpenter/ Fitter/ Painter/ Plumber/ Santras).	15	Each	447.00	6,705.00
11.7.2	b) Unskilled (Helper).	25	Each	369.00	9,225.00
11.8	Materials delivered and stacked at site as per direction of Engg.-in-charge.				
11.8.1	Bricks (1st Class)	50	Nos	12.00	600.00
11.8.2	Medium Sand	0.1	Cum.	1,978.00	197.80
11.8.3	Silver Sand	0.1	Cum.	848.00	84.80
11.8.4	Coarse Aggregate (Pakur variety) 20mm size	0.1	Cum.	2,826.00	282.60
11.8.5	Coarse Aggregate (Pakur variety) 10mm size	0.1	Cum.	2,543.00	254.30
11.8.6	White Cement	25	Kg.	25.00	625.00
11.8.7	Reinforcement (TMT Bar) Tor Steel Rods/HYSD/Fe 415/Fe 500/Fe 500 D (Other than SAIL/TATA/RINL)	10	Kg.	58.00	580.00
11.8.8	Cement OPC/ PSC/ PPC (53 Grade)	50	Kg.	7.00	350.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
11.9	Supplying, fitting and fixing C.I. Grating (heavy Type)				
11.9.1	Upto 100mm square or 100 mm Dia	5	Each	69.00	345.00
11.9.2	Above 100mm and upto 150mm square or round	5	Each	108.00	540.00
11.10	Providing and applying micro concrete of approved make as per manufacturer"s specification over RCC work or brick work including cleaning the existing surface , curing etc all complete as per instruction of Engineer - in - Charge.	10	Kg	28.00	280.00
11.11	Cleaning compound premises of shrubs, plants, jungles etc by cutting and removing as directed (Specific permission of Engineer-In-Charge prior to execution will be necessary). (Payment to be made on area cleared)	50	Sqm	11.00	550.00
11.12	Supplying and affixing optically clear polyester sun control window film (3 M) having acrylic pressure sensitive adhesive on one side & an acrylic abrasion resistant coating on the other, with composition of infrared absorbing carbon & free from any optical defect. The film characteristics should conform to ASTM E308, ASTM E903, ASTM E84 and ASHIRAE. The film should be pasted after preparatory works without any cracking, delamination, bubbling, discolouring and variation in total transmission of light across the width at any portion along the length doesn't exceed 2% over the average including scaffolding & relevant others to complete in all respect as per manufacturer's specification & direction of Engineer -in-Charge. Note: This work should not be executed without specific permission of Superintending Engineer) Material to be used: M/S Garware Polyester limited or approved equivalent.				
11.12.1	(a) Normal Quality : Film Thickness - 1.0 Mil, Glare Reduction > 45%, U factor < 1.15	1	Sqm	326.00	326.00
11.12.2	b) Superior Quality : Film Thickness - 2.0 Mil, Glare Reduction > 75%, U factor < 1.03, Emissivity < 0.70	1	Sqm	544.00	544.00

Cost of Civil work (Staff Quarters)::: 2,24,200.92
Say Rs. 2,24,201.00

BILL OF QUANTITIES (CIVIL WORK)

Name of work: Annual maintenance contract for Civil, Sanitary & Plumbing works at BITM, Kolkata for the year 2020-2021.

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.0	Earth Work :::				
1.1	Surface Dressing of the ground in any kind of soil including removing vegetation inequalities not exceeding 15 cm depth and disposal of the rubbish within a lead upto 75 m as directed.	10	Sqm	10.00	100.00
1.2	Earthwork in excavation of foundation trenches or drains, in all sorts of soil (including soil mixed with garbage/heterogenic soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75mtr. as directed. The item includes necessary trimming the sides of trenches, leveling, dressing and ramming the bottom, bailing out of water etc. as required complete. Depth of excavation not exceeding 1500mm.	5	Cum.	119.27	596.35
1.3	Earthwork in filling in foundation trenches or plinth with good earth, in layers not exceeding 150mm. including watering and ramming etc. layer by layer complete. (Payment to be made on the basis of measurement of finished quantity of work) With earth obtained from excavation of foundation.	5	Cum.	77.54	387.70
1.4	Filling in foundation or plinth by silver sand in layers not exceeding 150mm as directed and consolidating the same by thorough saturation with water ramming complete including the cost of supply of sand. (Payment to be made on measurement of finished quantity)	1	Cum.	936.21	936.21
2.0	Dismantling, Cutting Holes etc. :::				
2.1	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as directed within a lead of 150m. At any floor including roof.	0.5	Cum	447.00	223.50
2.2	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.				
2.2.1	a) Upto 150mm. Thick	0.3	Cum	939.00	281.70
2.2.2	b) Above 150mm thick	0.2	Cum	1,417.00	283.40
2.3	Dismantling R.C. floor, roof, beams etc. including cutting rods and removing rubbish as directed within a lead of 150m. Including stacking of steel bars.	0.1	Cum	1,956.00	195.60
2.4	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.	20	Sqm	19.00	380.00
2.5	Cutting holes and subsequent mending good of damages. Diameter upto 150 mm.				
2.5.1	a) In brick work [Cement - 4.0 kg/Mtr]	1	Mtr.	111.00	111.00
2.5.2	b) In concrete work (plain or R.C) [Cement - 3.0 Kg/Mtr.]	1	Mtr.	137.00	137.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
2.6	Removal of rubbish, earth etc. from the working site and disposal of the same, beyond the compound in conformity with the Municipal / Corporation rules for such disposal, loading into truck and cleaning the site in all respect as per direction of Engg.-in-Charge.	5	Cum	166.00	830.00
3.0	Plain and Reinforced Concrete and Allied Works :::				
3.1	Ordinary cement concrete (mix 1:2:4) with graded stone chips (20mm nominal Size) excluding shuttering and reinforcement, if any at any floor/level.	1	Cum.	5,449.81	5,449.81
3.2	Ordinary cement concrete (mix 1:1.5:3) with graded stone chips (20mm nominal Size) excluding shuttering and reinforcement, if any at any floor/level.	0.5	Cum.	5,999.81	2,999.91
3.3	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. In any floor.				
3.3.1	a) 25mm to 30mm thick wooden shuttering as per decision and direction of Engineer-in-charge.	2	Sqm.	335.00	670.00
3.3.2	b) Steel shuttering or 9 to 12 mm thick approved quality ply board shuttering in any concrete work.	1	Sqm.	369.00	369.00
3.3.3	c) 25mm to 30mm thick wooden shuttering without staging in foundation/ floor.	5	Sqm.	209.00	1,045.00
3.4	Extra for staging in any floor (Mode of measurement: area in plan x mean height of staging upto any height & level)	5	Cum	61.00	305.00
3.5	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction. For works in foundation, basement and upto any floor & any height, using Tor/ Mild Steel JSW/JSPL/SHYAM/SRMB/ BMASL/ELECTROSTEEL/SSL	0.1	MT	68,200.00	6,820.00
3.6	Supplying and laying Polythene sheet (150gm/ Sqm) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches.	5	Sqm.	24.00	120.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.7	40 mm. thick damp proof course with cement concrete (1:1.5:3) (with graded stone chips 20 mm nominal size) with water proofing compound of approved brand @ 0.2% weight of cement including cost of materials over two coats of non toxic acrylic polymer modified cementitious waterproofing slurry coat complete [cost of water proofing compound and non toxic paint to be paid seperately) for underground water retaining structures.	1	Sqm.	297.00	297.00
4.0	Masonry and Allied Works :::				
4.1	Single brick flat soling with picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand.	5	Sqm.	361.00	1,805.00
4.2	Labour for laying single brick flat soling with departmental bricks including carriage of departmental bricks within a lead of 150 metres preparation of bed as necessary with brick joints properly filled in and packed with local sand or powdered earth and including necessary cushion of similar materials below the soling. (The item include the cost of obtaining local sand or powdered earth)	10	Sqm.	40.00	400.00
4.3	Brick work with 1st class bricks (Class designation 75) in cement mortar (1:6)				
4.3.1	a) In foundation and plinth	0.5	Cum.	5,413.00	2,706.50
4.3.2	b) In superstructure at any floor.	0.5	Cum.	5,636.00	2,818.00
4.4	125mm thick brick work with 1st class bricks in cement mortar (1:4) in any floor.	5	Sqm.	736.00	3,680.00
4.5	75 mm thick brick work with 1st class bricks set in cement, sand mortar (1:4) in ground floor including H.B. netting in every alternate layer. In any floor.	2	Sqm.	504.00	1,008.00
4.6	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor). [Excluding cost of chipping over concrete surface]				
4.6.1	With 1:6 cement mortar 15mm. Thick.	60	Sqm.	151.00	9,060.00
4.6.2	With 1:4 cement mortar 10mm. Thick.	20	Sqm.	133.00	2,660.00
4.7	Labour for Chipping of concrete surface before taking up Plastering work.	10	Sqm.	21.00	210.00
4.8	Ornamental brick edging (75 mm wide) in compound roads, gardens etc. with 1st class or picked jhama bricks laid diagonally on end and with a corner slightly raised from the adjoining surface thus giving saw tooth appearance including cutting trench laying bricks and repacking the trench thoroughly on both sides of the edging complete as per direction.	5	Mtr.	72.88	364.40

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
4.9	Bricks edging 75mm wide with picked jhama bricks, laid true to line and level including cutting necessary trench in soil or in hard metalled surface, laying the bricks and repacking the trench (on both sides on the edging) with spoils and ramming the same thoroughly, complete as per direction. Brick-on- end edging (125 mm) depth	5	Mtr.	46.16	230.80
4.10	Labour for taking out brick on-edge of herring bone bond including removing debris to flank or berm sorting out serviceable materials and stacking.	5	Sqm.	17.32	86.60
5.0	Floor Finish and Allied Works :::				
5.1	Neat cement punning about 1.5mm thick in wall, dado, window sill, floor etc. (cement 0.152 cum per 100 Sqm)	20	Sqm.	34.00	680.00
5.2	Artificial stone in floor, dado, staircase etc with cement concrete (1:2:4) with stone chips, laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (1:2) including smooth finishing and rounding off corners including raking out joints or roughening of concrete surface and application of cement slurry before flooring works using cement @ 1.75 kg/sq.m all complete including all materials and labour. In ground floor 3 mm. thick topping (High polishing grinding on this item is not permitted with ordinary cement). Using grey cement, 25 mm. thick.	1	Sqm.	273.00	273.00
5.3	Supplying, fitting and fixing Black Stone slab used in Kitchen slab, alcove, wardrobe etc. laid and jointed with necessary adhesive Cement mortar (1:2) including grinding or polishing as per direction of Engineer-in -Charge in Ground Floor. Slab thickness 20 to 25 mm.	1	Sqm.	643.00	643.00
5.4	Supplying, fitting and fixing 20 mm. to 37 mm. thick chunar / Mirzapur / Dholpur slab in floor set in 20 mm thick (avg.) cement mortar (1:4) bed and pointing with cement mortar (1:2) (cement 1, stone dust 2) with admixture of pigment matching the stone shades, rough chisel dressed all complete as per direction of Engg.-in-Charge (Using cement slurry for bedding @ 4.4kg/Sqm. land jointing @ 2.4 kg/Sqm.)	1	Sqm.	1,048.00	1,048.00
5.5	18 mm to 22 mm thick, kota stone slab set in 20 mm thick(avg) cement mortar (1:4) in floor, stair & lobby including pointing in cement slurry with admixture of pigment matching the stone shade, including grinding, rounding off edges & polishing as per direction of Engineer-in-charge to match with the existing work. [Slurry for bedding @ 4.4 kg/sq.m and pointing @ 2.0 kg/sq.m]	1	Sqm.	1,024.00	1,024.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.6	Supplying, fitting and fixing 18 mm. To 22 mm. Thick kota stone slab in wall, dado in 15 mm thick [avg] cement mortar (1:3) including making suitable arrangement to hold the stone properly by brass/copper hooks including pointing in cement mortar(1:2)(1 cement : 2 marble dust) with admixture of pigments matching the stone shade, including grinding and polishing all complete as per direction of Engineer-in-charge including cost of materials, labour scaffolding, staging, curing complete. [Using cement slurry for bedding @ 4.4 kg/sq.m and for jointing @ 1.8 kg/sq.m]	1	Sqm.	1,160.00	1,160.00
5.7	Supplying, fitting and fixing Marble slab/ tile of 15 to 18 mm thick in floor, lobby, dado, stair, landing & trades etc over 20 mm thick (Avg.) base of cement mortar (1:2) laid with white cement slurry @ 4.4 Kg/Sqm. before placing marble & jointed with white cement slurry @ 2.0 kg/Sqm with necessary pigments including grinding, rounding off edges and Granite/ mirror polishing as per direction of Engineer in charge. With Makrana plain pink/ Adranga pink/ Garbh Gulabi/ Udaypur pink/ Udaypur Green/ Black Bhaslana	1	Sqm.	1,467.00	1,467.00
5.8	Supplying, fitting & fixing granite tiles 10 mm to 12 mm thick in columns, wall, facia etc. with 15 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 tiles @ 4.4 kg/sq.m & white cement slurry for joint filling @ 1.8 kg/sq.m]	1	Sqm.	1,762.00	1,762.00
5.9	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.	1	Sqm.	2,936.00	2,936.00
5.10	Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10 mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc.				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.10.1	(A) Floor : With Sand Cement Mortar (1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 kg/Sq.m & joint filling using white cement slurry @ 0.20 kg/Sq.m.				
5.10.1.1	(a) Area of each tile upto 0.09 sqm (i) Coloured decorative	3	Sqm.	755.00	2,265.00
5.10.1.2	(b) Area of each tile above 0.09 sq m (i) Coloured decorative	1	Sqm.	920.00	920.00
5.10.2	(B) Wall : with Sand Cement Mortar (1:3) 15 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 kg/Sq.m & joint filling using white cement slurry @ 0.20 kg/Sq.m.				
5.10.2.1	(a) Area of each tile upto 0.09 sq m (i) Coloured decorative	10	Sqm.	757.00	7,570.00
5.10.2.2	(b) Area of each tile above 0.09 sq m (i) Coloured decorative	1	Sqm	1109.00	1,109.00
5.11	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 etc. set in 20 mm. sand cement mortar (1:4) and 2 mm thick cement slurry back side of tiles using cement @ 2.91 Kg/Sqmt. Or using polymerized adhesive (6 mm thick layer applied directly over finished artificial stone floor/ mosaic etc. with out any backing course) laid after application slurry using 1.75 Kg. of cement per Sqm. below mortar only, joins 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.				
5.11.1	With application slurry @ 1.75 kg/Sqm, 20mm sand cement mortar (1:4) & 2 mm thick cement slurry at back side of tiles, 0.2 kg/Sqm white cement for joint filling with pigment				
5.11.1.1	i) Deep colour & white	1	Sqm.	1,704.00	1,704.00
5.11.1.2	ii) Light colour	1	Sqm.	1,285.00	1,285.00
5.11.2	With polymerized Adhesive (6mm thick) & epoxy grouting materials for filling joints including spacer 2 mm (Applied directly over finished artificial stone floor/ mosaic etc.)				
5.11.2.1	i) Deep colour & white	1	Sqm.	1,785.00	1,785.00
5.11.2.2	ii) Light colour	1	Sqm.	1,366.00	1,366.00
5.12	Supplying, fitting & fixing Glass mosaic tiles at finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design, fixing in customize design as per direction of Engineer in- Charge. The glass mosaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Engineer-in-Charge.				
5.12.1	i) Plain Type/ Random Mix	1	Sqm.	1,302.00	1,302.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.12.2	ii) Gradation/ Progression Type	1	Sqm.	2,100.00	2,100.00
5.13	Supplying & laying 20 mm designer chequered tiles of any shade and of approved quality as per IS: 1237: 1980 laid in patterns as directed in pavement, footpath, stair case including necessary underlay 25 mm thick average cement mortar (1:3) complete in all respect with all labour and materials [using cement slurry @ 4.4 kg/Sq.m at back side of tiles.]	1	Sqm.	836.00	836.00
5.14	Supplying & laying of approved make and brand of scratch proof, flexible & homogeneous P.V.C. Vinyl flooring 2 mm thick conforming to IS:3462 - 1982 in required finish, fixed with synthetic acrylic adhesive after preparing the floor, levelling & smothering when necessary with suitable putty, as per the design & instruction of the Engineer-in-charge. 2 mm thick.	1	Sqm.	510.00	510.00
5.15	50 mm thick interlocking designer concrete paver block M-30 grade for non-traffic zone, building premises, garden, parks, domestic drive as per IS: 15658-2006 (over 20-30 mm medium sand bed on 200mm thick bound granular / granular base course including cost of sand for sand bed but excluding cost of base course & subgrade preparation.)				
5.15.1	(i) Grey	1	Sqm	1,254.00	1,254.00
5.15.2	(ii) Coloured Decorative	1	Sqm	1,350.00	1,350.00
5.16	Laying old cement concrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost).	1	Sqm	286.60	286.60
5.17	Providing and fixing at or near ground level precast cement concrete in kerbs (size: 450 mm x 350 mm x width 150 mm at bottom with bevelled nosing at top) of cement concrete M20 Grade without reinforcement, fixing as per approved pattern and setting in position at site after preparing the bed grade and slopes by laying Cement concrete with jhama khoa (1:4:8) as per specification and direction of Engineer-in- Charge including filling of joints with 10 mm thick cement mortar (3:1) and back filling the vertical piece properly with earth duly compacted and curing the mortar joints for at least 3 days including cost and carriage of all materials complete. (Pre-cast Cement Concrete kerbstone shall be approved by Engineer-in-charge) including earthwork in excavation etc complete.	1	Rm	636.00	636.00
5.18	Labour for setting tiles in floor/ pavement in cement mortar (1:4) and joints finished with white cement.	1	Sqm.	101.00	101.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.19	Repairing cracks in floor with cement mortar (1:2) with necessary pigment to match with existing works, including prior cutting and cleaning the cracks as directed.	50	Mtr.	6.91	345.50
5.20	Washing and cleaning with oxalic acid powder using 33gms./Sqmtr.				
5.20.1	a) Marble floor / marble dado	50	Sqm.	6.96	348.00
5.20.2	b) Floor / dado other than marble.	50	Sqm.	5.52	276.00
5.21	Polishing only of old marble or terrazzo work with oxalic acid powder using 33 gms. / Sqm. by manual labour / machine where necessary.	10	Sqm.	38.00	380.00
5.22	Grinding to Marble/ mosaic floor including remaining stone, if necessary, after cutting with manual labour / machine, where necessary.	10	Sqm.	20.00	200.00
5.23	Resetting of old Kota/ Dungri/ Mirzapur/ sand stone slab in 20 mm thick (avg.) cement mortar (1:4) bed, joints finished with necessary pigments or with white cement including dismantling old mortar etc.	1	Sqm.	215.00	215.00
5.24	Taking out Mirzapur or glazed porcelain tiles carefully by chiselling from walls or floor including stacking serviceable material as directed.	1	Sqm.	106.00	106.00
5.25	Resetting old glazed porcelain/ ceramic tiles in 20 mm thick cement mortar (1:4) including 4 nos of key stone (10mm) fixed with adhesive of approved quality & 2 mm thick cement slurry using cement @ 2.91 Kg/Sqm at the back of tiles and finishing joints with white cement & colouring oxide (if required) to match the colour of tiles over application slurry @ 1.75 kg/sqm below cement mortar including dismantling the old mortar etc.	1	Sqm.	404.00	404.00
6.0	Roofing, Down pipes etc :::				
6.1	Asbestos corrugated (Trafford or similar approved quality) sheet (6 mm. thick) work (excluding the supporting framework) fitted & fixed with 9.5mm. dia J or L hook-bolt and nuts, limpet and bitumen washers and putty with 150mm. end lap & one corrugation minimum side lap complete (payment should be made on area of finished work) a) In roof.	1	Sqm.	471.00	471.00
6.2	Supplying, fitting & fixing Zn-Al alloy (55% Al & 45% Zn) coating of 150 grams per sq. metre (followed by colour coated on both side) steel sheet work having minimum yield strength of 550 Mpa of trapizoidal profile of approved make as per IS: 15965: 2012 and IS: 14246: 2013 (excluding the supporting frame work) fitted and fixed with 55 mm & 25 mm self tapping screw, EPDM Washer 16 mm dia & 3 mm th. washer etc. complete with 150 mm end lap and one corrugation minimum side lap. DURASHINE Roof colour coated sheet of Tata Blue Scope Steel Brand 0.5 mm thick sheet (Payment to be made on area of finished work).	1	Sqm.	787.00	787.00
6.3	Galvanised iron sheet ridging fitted with necessary bolts, screws, washers etc complete. (225mm end lapping) 300 mm lapping each way with 0.63 mm sheet.	1	Mtr	380.00	380.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.4	Galvanised iron sheet eaves gutter fitted and fixed with necessary 50 mm X 6 mm M.S flat bar clamps bent to design, bolts, nuts, washers etc. complete. Eaves gutter made of 0.63 mm. sheets.(300mm End lapping) 225 mm	1	Mtr	342.00	342.00
6.5	Supplying, fitting and fixing glass reinforced polyester translucent fiber glass sheet to match with GCI Corrugation as per IS : 12866-1989 in roof fitted and fixed with 10 mm dia "J" or "L" hook, bolts and nuts, limpet and bitumen washers and putty with 150 mm end lap and one corrugation minimum side lap complete. 1.6 mm +/- 0.2 mm thick sheet. (3.25 kg/sq.m) Coloured other than natural white or tinted blue.	1	Sqm.	768.00	768.00
6.6	Supplying, fitting and fixing glass reinforced polyester translucent ridging 450 mm long each way as per IS 2866 - 1989 fitted and fixed with bolts J hooked screws and bitumen washers complete. 1.6mm +/- 0.2 mm thick sheet. Coloured other than natural white or tinted blue.	1	Mtr	609.00	609.00
6.7	Supplying, fitting & fixing polycarbonate sheet of approved make & brand conforming to IS: 14443-1997 and having 50 micron UV protection layer under co-extrusion technology, Fire rating being B-s1 as per EN13501-1 certification, fitted and fixed with 60mm wide aluminium channel section top and bottom member in dry-glaze sandwich system, (unit wt. of top and bottom members: 0.375 kg/m & 0.69 kg/m) of approved brand and profile, EPDM quality rubber gaskets, anti dust tape, end closer "C" channel and 75 mm long Self tapping screw being drilled through the centre leg of the bottom section with nuts placed at 300 mm apart without anyway puncturing the polycarbonate sheet, EPDM Washer 16 mm dia & 3 mm thick washer etc complete strictly as per manufacturers specification and direction of Engineer-in- Charge. (Payment to be made on area of finished work) . In Roof:- Natural/ Blue/Green/Bronze /Opal/Metallic grey colour				
6.7.1	With 2 wall 6 mm overall thickness (wt.1.30kg/sqm, Ugvalue being 3.7 W/m2K, Min. cold bending radius of 900 mm)	1	Sqm	1,102.00	1,102.00
6.7.2	With 2 wall 8 mm overall thickness (wt.1.50kg/sqm, Ugvalue being 3.3 W/m2K, Min. cold bending radius of 1200 mm)	1	Sqm	1,326.00	1,326.00
6.7.3	With 2 wall 10 mm overall thickness (wt.1.70kg/sqm, Ugvalue being 3.1 W/m2K, Min. cold bending radius of 1200 mm)	1	Sqm	1,544.00	1,544.00
6.7.4	With 4 wall 8mm overall thickness (wt.1.60kg/sqm, Ugvalue being 2.76 W/m2K, Min. cold bending radius of 1200 mm)	1	Sqm	1,551.00	1,551.00
6.7.5	With 4 wall 10 mm overall thickness (wt.1.75kg/sqm, Ugvalue being 2.5 W/m2K, Min. cold bending radius of 1500 mm)	1	Sqm	1,829.00	1,829.00
6.8	Galvanised or painted wind tie made of M.S. flats, fitted and fixed complete including cost of necessary fitting, M.S.flat 40mm x 6mm.	5	Mtr.	119.00	595.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.9	Taking out wind-tie from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within the compound and stacking.	10	Mtr.	15.00	150.00
6.10	Taking out old damaged tarfelt from the roof, parapet etc. preparing the roof surfaces by removing all spoils, blisters, moss etc. from the working site and disposal of the same beyond the compound and cleaning the site in all respect as per direction of Engineer-in-Charge.	10	Sqm	12.00	120.00
6.11	<p>Supplying & laying 3mm thick pre-fabricated plastomeric water proofing membrane conforming to EN 12311-1 & ASTM D 5147, manufactured with atactic poly propylene (APP) modified premium grade asphalt , specially reinforced with non-woven polyester core with polyester reinforcement @160 gms per sqm & both faces covered with thermo-fusible polyethylene film /MineraL on top face over a coat of primer @ 0.40 lit/sqm of manufacturer's specification on smooth, clean dry surface prepared wherever required including repairing the old surface with cement mortar (1:2) admixing Sika Latex etc. Lap joint shall be provided of 75 mm in longitudinal & 100 mm in transverse direction and fused using LPG/ Propane torch employing extra care ensuring full bondage,</p> <p>complete removal of entrapped air and sealing edges into grooves in appropriate manner as per direction of Engineer in-charge all complete including materials,labour and applicable taxes. (Payment shall be made on the basis of finished surface area)</p> <p>Membrane Property: Softening Point > 150 deg C, Cold Flexibility < -6 deg C, Tensile Strength, N/cm : 600 (longitudinal), 450 (transverse), Tearing Strength, N: 300 (longitudinal), 200 (transverse) Make : Sika India Pvt Ltd or approved make.</p>	1	Sq.m	407.00	407.00
6.12	Repairs to roof cracks with sand and cement mortar (1:4) including cutting grooves and cleaning cracks and grouting the cracks with net cement before repairs (cement 0.63 kg/m).	50	Mtr.	14.00	700.00
6.13	<p>Fitting and fixing old pieces of asbestos, G.C.I. or C.I. sheets or plain sheets including closing old holes with washers and sheet-bolts and nuts, etc. and including fixing the same to supporting frame with necessary hook-bolts, washers, putty etc. (excluding cost of sheets). (Payment to be made on area of finished work.)</p> <p>(ii) With all new fittings including the cost thereof. (a) In roof</p>	2	sqm	104.00	208.00
6.14	Renewing galvanised J or L hook-bolt with nut and with necessary limpet and bitumen washers, putty etc. fitted & fixed completed (total length of bolt upto 225mm). 8mm. dia bolt.	20	Each	27.00	540.00
6.15	Removing chockage of rain water pipes with split bamboo.	50	Mtr.	7.51	375.50

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.16	Supplying, fitting & fixing UPVC pipes A-Type and fittings conforming to IS -13592-1992 with all necessary clamps nails, including making holes in walls, floor etc. cutting trenches in any soil through masonry concrete structures etc if necessary and mending good damages including joining with jointing materials (Spun Yarn, Valamoid/Bitumen/M-Seal etc.)				
6.16.1	UPVC Pipes : 75 mm Dia	3	Mtr.	188.00	564.00
6.16.2	UPVC Pipes : 110 mm Dia	3	Mtr.	251.00	753.00
6.16.3	UPVC Fittings: Plain tee 75 mm. Dia.	2	Nos	102.00	204.00
6.16.4	UPVC Fittings: Plain tee 110 mm. Dia.	2	Nos	172.00	344.00
6.16.5	UPVC Fittings : Plain Y 75 mm. Dia.	2	Nos	125.00	250.00
6.16.6	UPVC Fittings : Plain Y 110 mm. Dia.	2	Nos	223.00	446.00
6.16.7	UPVC Fittings : Bend 87.5 degree, 75 mm Dia	2	Nos	84.00	168.00
6.16.8	UPVC Fittings : Bend 87.5 degree, 110 mm Dia	2	Nos	140.00	280.00
6.16.9	UPVC Fittings : Shoe : 75 mm. dia	2	Nos	78.00	156.00
6.16.10	UPVC Fittings : Shoe : 110 mm. dia	2	Nos	111.00	222.00
7.0	Structural Steel, Grills, Gates etc. :::				
7.1	<p>M.S. structural works with hollow sections (TATA make square or rectangular shape) conforming to IS: 806-1957 & IS:1161-1958) connected to one another with bracket, gusset, cleat as per design, drawing & direction of Engineer-in-Charge complete including cutting to requisite shape & size, fabrication including metal arc welding conforming to IS: 816-1956 & IS: 9595 using electrodes of approved make and brand conforming to IS:814- 1957, haulage, hoisting and erection all complete.</p> <p>The rate includes the cost of all M.S. Hollow section, all consumables such as electrodes, gas and hire charges of all tools and plants and labour required for execution and all incidental chages (such as electricity, labour insurance) etc. complete.</p> <p>Payment to be made on the basis of calculated weight of structural memebtrs of MS Holow Section as specified in relevent IS code in finished work. Payment for gusset, bracket, cleat may be made by adding the actual weight of such items with weight of finished structural members. The rates are considered for a hight of erection 8 m. / 2nd floor level from the ground. Add 1.5 % extra over the rate for each additional floor or 4m. beyond the initial 8 m. or part thereof. For any kind of Structural Works like trusses, gates etc.</p>	0.1	MT.	74,900.00	7,490.00
7.2	M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in any floor. (The weight of grill per sq.m. will be determined by taking the physical weight of fabricated grill and dividing the same by covered area of the same.)				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
7.2.1	i) Grill weighing above 10 Kg./sq.mtr and up to 16 Kg./sq.mtr.	0.2	Qntl.	7,238.00	1,447.60
7.2.2	ii) Grill weighing above 16 Kg./sq.mtr and above	0.2	Qntl.	7,046.00	1,409.20
7.3	M.S. gate of Jail type as per approved design made of strong M.S. frame work, intermediate stiffeners and round / square bars or angles. M.S. sheet (not less than 14 gauge) gussets, cleats etc. including necessary riveting, bolting, welding, locking and hanging arrangements, fitting and fixing complete as per direction of the Engineer-in -charge.	0.2	Qntl.	7,566.00	1,513.20
7.4	Supplying 1.5mm thick M.S. sheet fitted and fixed on one or both faces of M.S./ W.I. gate etc. with point welding at not more than 150mm apart complete in all respect as per design including cost of all labour and materials.	2	Sqm.	977.00	1,954.00
7.5	Supply, fitting & fixing of collapsible gate with 40mm x 40mm x 6mm tee as top and bottom guide rail 20mm x 10mm x 2mm vertical channels 100 mm apart in full stretched position 20mm x 5 mm MS flat as collapsible gate bracings properly riveted and washered including 38mm steel rollers including locking arrangements, fitted and fixed in position with lugs set in cement concrete and including cutting necessary holes, chasing etc. in walls, floors etc. and making good damage complete.	1	Sqm.	3,402.00	3,402.00
7.6	Supply, fitting & fixing steel rolling shutter profile type with 18 BG approve type steel latch section 75mm wide, fitted with coil wire spring to necessitate the fitting of required nos of C.I. pulleys on heave type solid drawn seamless steel tube complete with locking arrangements both inside and outside specially builtup side guide channels including providing a hood for the steel rolling shutter in the room, painting two coats of approved aluminium paint over a coat of red lead primer complete. (Measurement will be made on the area of opening covered by the rolling shutter corrected upto 2 decimal.)	1	Sqm.	2,170.00	2,170.00
7.7	Supplying fitting and fixing steel rolling grills link type, shutter with 18 B.G .of approved type steel to the section 75mm wide, fitted with coil wire spring to necessiate the fitting of required Nos. of C.I. Pulleys on heavy type solid drawn seamless steel tube complete with locking arrangements both inside and outside specially builtup side guide channels including providing a hood for the steel rolling shutter in the room, painting two coats of approved aluminium paint over a coat of red lead primer complete. (Measurement will be made on the area of opening covered by the rolling shutter corrected upto 2 decimal.)	1	Sqm.	2,833.00	2,833.00
7.8	Repairing collapsible gate by cutting out all rivets as necessary re-assembling all members including welding pieces of channels, straightening bent bars and riveting with new rivets and fitting in position and painting two coats	2	Sqm.	379.00	758.00
7.9	Greasing, oiling, cleaning collapsible gate and repairs to locking arrangements.	50	Sqm.	17.00	850.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
7.10	Greasing, oiling, cleaning rolling shutters excluding repairs to inside locks.	50	Sqm.	12.00	600.00
7.11	Labour for taking out rolling shutter (only shutter portion) dismantling by parts for repair or (replacement of damaged parts only), rehangng and refitting the same in position after necessary repairs (excluding the cost of supply of new parts).	2	Sqm.	283.00	566.00
7.12	Renewing seam pipe for rolling shutter as per existing size and shape fitting, fixing complete	3	Mtr.	210.00	630.00
7.13	Renewing side split pin for seam pipe for rolling shutter.	5	Each	26.00	130.00
7.14	Oiling and greasing of rolling shutter and repair to in side lock.	10	Sqm.	73.00	730.00
7.15	Renewing profile of rolling shutter including fitting fixing complete as per existing size and shape.	6	Mtr.	54.00	324.00
7.16	Renewing spring of rolling shutter as per existing size and shape including fitting fixing complete	1	Each	609.00	609.00
7.17	Renewing steel plated or oxidized casement stay or peg stay of steel window frames including painting two coats approved paint complete.	5	Each	70.00	350.00
7.18	Renewing one point steel (oxidised) handle of steel door and windows as directed including painting complete.	5	Each	61.00	305.00
7.19	Repairing steel shutter with new rivets including taking out and re-fixing, adjusting welding, cleaning, cutting holes mending good damage to match with the existing one.	1	Sqm.	401.00	401.00
7.20	Renewing hinge of steel shutter including taking out old one by cutting and fixing new hinges by welding and mending good damages complete.	2	Each	190.00	380.00
7.21	Providing & fixing steel peg stay 300 mm long including fitting and fixing.	10	Each	25.00	250.00
7.21	Welding in M.S. structural work with gas or electric				
7.21.1	(a) Tack weld	50	Point	9.00	450.00
7.21.2	(b) Continuous weld	10	Cm run	9.00	90.00
8.0	Painting, White washing, Polishing etc. :::				
8.1	White washing including cleaning and smoothening surface thoroughly (5 parts of stone lime and 1 part of shell lime should be used in the finishing coat) all floors. Two coats or more (to be done on specific instruction).	10	Sqm.	18.14	181.40
8.2	Applying Decorative cement based paint of approved quality after preparing bed including scrapping the surface thoroughly on plastered or concreted surface (manufacturers specifications to be followed) at any floor.				
8.2.1	i) One coat	50	Sqm.	31.00	1,550.00
8.2.2	ii) Two Coat	50	Sqm.	49.00	2,450.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
8.3	Acrylic Distemper to interior wall, ceiling with a coat of solvent based interior grade acrylic primer (as per manufacturer's specification) including cleaning and smoothening of surface. Two Coats	10	Sqm.	70.00	700.00
8.4	Applying Water based 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- One Coat.	300	Sqm.	30.80	9,240.00
8.5	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 EIC).				
8.5.1	i) One coat Standard quality	50	Sqm.	37.00	1,850.00
8.5.2	ii) Two Coats Standard quality (as approved by the Engineer-in-Charge)	150	Sqm.	62.00	9,300.00
8.5.3	iii) Two Coats (Luxury quality) (Berger make: Silk Glamour/ Silk Luxury Emulsion; Asian Paints: Royale Luxury Emulsion/ Royale Shyne Luxury Emulsion/ Royale Matt; AKZONOBEL: Velvet Touch Diamond Glow) as approved by E-I-Charge prior application.	100	Sqm.	70.00	7,000.00
8.6	Applying Exterior grade Acrylic primer of approved 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). (a) One Coat & more	300	Sqm.	31.40	9,420.00
8.7	Protective and Decorative Acrylic exterior emulsion paint (weather coat) of approved quality, as per manufacturer's specification and as per direction of EIC 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.				
8.7.1	Two coats or more - Normal Acrylic Emulsion	200	Sqm.	67.00	13,400.00
8.7.2	Two coats or more - Premium 100% Acrylic Emulsion (Weathershield Max of AKZONOBEL or approved make)	100	Sqm.	84.00	8,400.00
8.8	Priming one coat one timber or plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	100	Sqm.	38.00	3,800.00
8.9	Priming one coat one timber or plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	100	Sqm.	29.00	2,900.00
8.10	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary.				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
8.10.1	a) Single coats (with any shade except white) with high gloss on timber or plastered surface.	50	Sqm.	54.00	2,700.00
8.10.2	b) Two coats (with any shade except white) with high gloss on timber or plastered surface.	100	Sqm.	81.00	8,100.00
8.10.3	c) Single coats (with any shade except white) with high gloss on steel or other metal surface.	50	Sqm.	51.00	2,550.00
8.10.4	d) Two coats (with any shade except white) with high gloss on steel or other metal surface.	100	Sqm.	79.00	7,900.00
8.11	Painting with superior quality aluminium paint of approved make and brand including smoothing surface by sand papering etc. on metal surface.				
8.11.1	Single coat	20	Sqm	34.00	680.00
8.11.2	Two Coats	20	Sqm.	57.00	1,140.00
8.12	Painting with ready mixed red lead paint of approved make and brand - One coat.	20	Sqm.	31.00	620.00
8.13	Painting with ready mixed Black Japan of approved make and brand including smoothing surface - Two coats.	10	Sqm.	56.00	560.00
8.14	French polishing to woodwork including preparing surface high gloss on old polished surface including complete removal of old polish.	2	Sqm.	538.00	1,076.00
8.15	Ready mix wax polishing to wood work including preparing surface on old wax polished surface including removal of old polish.	5	Sqm.	115.00	575.00
8.16	Rendering the surface of walls and ceiling with white cement based wall putty of approved make and brand (1.5 mm thick).	20	Sqm	110.00	2,200.00
8.17	Cleaning the walls and ceiling by scraping, sand papering and smoothening down the surface including putting.	50	Sqm	17.00	850.00
8.18	Removing old scales, blisters etc. of interior surface of walls, ceiling by scraping etc. and preparing smooth and even surface with rendering or cement mortar (1:2) (as necessary), to make the surface suitable for receiving distemper/ acrylic emulsion etc.. (Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge)	100	Sqm	10.17	1,017.00
8.19	Scraping of moss, blister etc. thoroughly from exterior surface of walls necessitating the use of scraper, wire brush etc. (Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge).	100	Sqm	7.00	700.00
8.20	Scraping and removing greasy soot from walls or ceiling of kitchen or similar smoke affected rooms and preparing the surface.	100	Sqm	11.00	1,100.00
8.21	Cement washing including cleaning and smoothening surface thoroughly (cement to be used @25 kg./100 sq.m. of surface for two coat) Two coats or more	100	Sqm	14.24	1,424.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
8.22	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of face, etc. complete.				
8.22.1	On steel surface (old/new)	10	Sq.m	167.75	1,677.50
8.22.2	On concrete surface (old/new)	10	Sq.m	167.40	1,674.00
9.0	Carpenter's Work :::				
9.1	Wood work in door and window frame (Local sal) fitted and fixed in position complete including a protective coat of painting at the contact surface of the frame excluding cost of concrete, Iron Butt Hinges and M.S. clamps. Sal : Local.	0.05	Cu.M	77,671.00	3,883.55
9.2	Panel shutters of door and window, as per design (each panel consisting of single plank without joint), including fitting and fixing the same in position but excluding the cost of hinge and other fittings. (In case of non-supply of single plank, penal rate of reduction of 20% will be made) 35 mm thick shutters with 19 mm thick panel of size 30 to 45 cm. of ordinary Teak Wood.				
9.2.1	Ordinary teak wood	1	Sqm.	4,220.00	4,220.00
9.2.2	Sishu, Gamar, champ, badam, bhola, mogra, hallak	1	Sqm.	2,948.00	2,948.00
9.3	Z-batten shutter of door and window as per design having tongued and groove-half lap jointed as per direction of the Engineer-in-charge including fitting and fixing shutter in position, but excluding the cost of hinges and other fittings in ground floor. Shutter with 25mm thick planks, 19mm thick battens. Sishu, Gamar, champ, badam, bhola, mogra, hallak.	1	Sqm	2,750.00	2,750.00
9.4	Supplying solid flush type doors of commercial quality, the timber frame consisting of top and bottom rails and side styles of well seasoned timber 65 mm wide each and the entire frame fitted with 37.5 mm 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 ground floor. 35 mm thick shutters (single leaf)	2	Sqm.	2,659.00	5,318.00
9.5	Supplying, fitting and fixing fiber reinforced polymer (FRP) Composite door frame as per approved section with glass fiber reinforced plastic moulded skins and a special sandwich core, so as to impart monolithic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS: 4020 door testing performance criteria. 66 mm x 70 mm	5	Mtr	446.00	2,230.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.6	Supplying, fitting & fixing fiber reinforced polymer (FRP) composite door shutters as per approved design with glass fiber reinforced plastic moulded skins and a special sandwich core, so as to impart monolithic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS:4020 door testing performance criteria In Ground Floor. 25 mm thick.	2	Sqm	2,581.00	5,162.00
9.7	Supplying fitting and fixing in position approved P.V.C. door frame (Matt finish) made of extruded P.V.C. multichamber hollow section having dimensions 60mm x 50mm x 2mm (+/-0.2mm), horizontal section will be joined with vertical section by galvanised steel screws after inserting two number steel brackets as reinforcement making suitable space for placing hinges, one steel tube 40mm x 20mm x 1.20 mm will be inserted on one full vertical side of the frame (hinge side) as reinforcement, the frame will then be fixed in the opening with the help of P.V.C. expandable fastner/wooden gutties and galvanised steel screws including cost of all materials and labour, hire charges of tools and appliances, carriage of all materials, taxes and all other incidental charges complete.	5	Mtr	279.00	1,395.00
9.8	Supplying fitting and fixing P.V.C. door shutter (30mm thick) of approved quality & shade in position, the style & rail of the P.V.C. door shutter will be made of rigid P.V.C. multicavity hollow chamber of 59 mm x30 mm section with 2.0 mm (+/-0.2 mm) wall thickness.Horizontal & vertical section shall be fixed to each other by self tapping screws and 1 solid polymeric or M.S. galvanised tubular 'L' shaped bracket 100mm x 200mm in each corner of the shutter frame for placing hinges. Polymer based multicavity hollow section of 120 mm x30mm with 2.0 mm (+/- 0.2 mm) wall thickness will be fitted in the middle, reinforced by solid polymer bar of 200 mm long at both ends and screws from both sides as lock rail. The section frame will then be fitted in by PVC panels of size 100 mmx25 mm with wall thickness of 1.2 mm (+/- 0.2 mm) and 2 nos. of 6 mm dia bright rod will be inserted horizontally with both side check and nut system and stretches where fixing of hinges / hasp bolt / tower bolt / door ring are required to be strong enough to with stand wear and tear. The rate is inclusive of cost of all materials, labour, and hire of tools and plants and appliances/c carriage of all materials taxes and all other incidental charges complete.	1.5	Sqm	2,127.00	3,190.50
9.9	Supplying, fitting and fixing M.S. clamp for door and window frame made of flat bent bar, end bifurcated with necessary screws etc in cement concrete (1:2:4) including cutting of brick work/ concrete work as per direction. (Cost of concrete will be paid saperately) 40 mm x 6 mm x 200 mm long	6	Each	25.00	150.00
9.10	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete.				
9.10.1	75 mm x 47 mm x1.80 mm	6	Each	50.00	300.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.10.2	100 mm x 58 mm x 1.90mm	6	Each	65.90	395.40
9.11	Iron hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm dia rod with centre bolt and round fitting - 300 mm long.	3	Each	166.00	498.00
9.12	Brass hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm dia rod with centre bolt and round fitting - 300 mm long.	1	Each	657.00	657.00
9.13	Supplying, fitting and fixing door stopper (Steel body)	5	Each	67.00	335.00
9.14	Supplying, fitting and fixing 4mm thick acrylic ornamental finger plate made of transparent acrylic sheet including providing holes of knobs and keys as per existing shutter and chamfering the edges of acrylic sheet.	1	Sqm	699.00	699.00
9.15	Supplying 'Godrej' mortice lock chromium plated with latch and keys 4 levers, including fitting and fixing complete	1	Each	1,081.00	1,081.00
9.16	Supplying, fitting and fixing Godrej Multi Lock or equivalent	2	Each	136.00	272.00
9.17	Hydraulic door closer of approved quality as per ISI standard fitted and fixed complete. Heavy type (I.S.I. Size 3) Godrej make or approved equivalent.	1	Each	2,064.00	2,064.00
9.18	Taking out and re-fixing after oiling and cleaning including adjusting spring of different types of automatic door closer with necessary screw complete.	5	Each	66.00	330.00
9.19	Repairs to automatic door closer including replacement of damaged main spring, oiling and adjusting as necessary including taking out and refitting the same.	2	Each	318.00	636.00
9.20	Labour for taking out door and window frame including shutter for repair or replacement of different parts of the frame & refixing the same including mending good all damages complete. (Concrete and brick work for mending damage will be paid separately) Area upto 2.5 Sqm.	5	Sqm	119.00	595.00
9.21	Taking out shutter of door and window, dismantling by parts (for repair or replacement of damaged parts), reassembling and refitting and rehang same with old fittings but with new screws as necessary.	5	Sqm	126.00	630.00
9.22	Taking out door and window shutters and rehang the same with old fittings but with new iron screws.	5	Sqm	78.00	390.00
9.23	Supplying bubble free float glass of approved make and brand conforming to IS : 2835-1987 and fixed with nails, putty etc complete.				
9.23.1	4 mm thick coloured / tinted / smoke glass.	5	Sqm	468.00	2,340.00
9.23.2	5 mm thick coloured / tinted / smoke glass.	2	Sqm	585.00	1,170.00
9.23.3	6 mm thick coloured / tinted / smoke glass.	2	Sqm	661.00	1,322.00
9.24	Renewing worn out putty of glass panes.				
9.24.1	Panes not exceeding 0.2 Sqmtr.	10	Each	33.00	330.00
9.24.2	Panes exceeding 0.2 Sqmtr. But not exceeding 0.5 Sqmtr.	10	Each	51.00	510.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.25	Cleaning and removing paint mark from glass pane with spirit and removing strains etc.	25	Sqm.	17.00	425.00
9.26	Taking out existing partition / ceiling of particle board, Masonic board, ply board, soft board etc. of any thickness and re-fixing same in new position with necessary clamps making holes in walls floor, roof and mending damages in old and new one in cement concrete (4:2:1) with stone chips and cement plaster (1:4) and lime washing three coats complete.	10	Sqm.	55.00	550.00
9.27	<p>Providing and fixing of false ceiling with 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 / 600 mm long and Wall Angle. The Wall Angle shall be fixed on PVC Dash Fasteners on the perimeter of the wall by steel screws with distance 300mm c/c. The Main Runners to be placed @ 1200 mm. The Cross Tee 1200mm will be inserted in the pre-cut slots of Main Runner at a regular interval of 600 mm to form a modular grid of 1200mm X 600mm.</p> <p>Additional Cross Tees of 600 mm shall be placed perpendicular to the Cross Tee 1200 mm long to finally form a grid of 600 mm X 600 mm. Grid of module size 600 mm X 600 mm shall be supported by 6 mm dia G.I. wire from purlins / soffit. 6 mm thick High Pressure Steam Cured Non Asbestos Fibre Cement Standard Ceiling Board (Density > 1300 Kg/m³) of size 595 mm X 595 mm, conforming IS 14862 & Type B Category III of ISO 8336, tested as per AS-1530 part 3 & BS-476 Part 4,5,6,7 & 8, should be placed in the Grid module to form a False Ceiling. All complete as per the drawing & directions of Engineer-in-charge.</p> <p>False Ceiling (with 6mm thick Fibre Cement Designer Board and E-Grid T-2430).</p>	1	Sqm	591.00	591.00
9.28	Providing and fixing of false ceiling with powder coated exposed G.I. Grid suspension system (E-Grid U-1520 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200 mm c/c) consisting of Main Runner 3600 mm long, Cross Tee 1200 mm / 600 mm long and wall angle. The Wall Angle shall be fixed on PVC Dash Fasteners on the perimeter of the wall by steel screws with distance 300 mm c/c. The Main Runners to be placed @ 1200 mm. The Cross Tee 1200 mm will be inserted in the pre-cut slots of Main Runner at a regular interval of 600 mm to form a modular grid of 1200 mm x 600 mm.	1	Sqm.	1,357.00	1,357.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
	<p>Additional Cross Tees of 600 mm shall be placed perpendicular to the Cross Tee 1200 mm long to finally form a grid of 600 mm X 600 mm. Grid of module size 600 mm X 600 mm shall be supported by 6 mm dia G.I. wire from purlins / soffit. 15mm thick OW Acoustic Board (Mineral Fiber Acoustic Ceiling Tiles) of approved pattern and size 595mm X 595mm with NRC value > 0.65 should be placed in the Grid module to form a False Ceiling. All complete as per the drawing & directions of Engineer-in-charge.</p> <p>a) Acoustic False Ceiling (with 15 mm thick OW Acoustic Board and E-Grid U-1520). At any Floor</p>				
9.29	<p>M.F. suspended ceiling made with 12.5 mm thick Gypsum plaster board including G.I. perimeter channel of 0.55 mm flush (having two flanges 20 mm and 30 mm respectively and web 27 mm) along with perimeter of ceiling with G.I. intermediate channel of 0.9 mm thick size 45 mmx15mm placed at 750 mm c/c with G.I. ceiling angle of size 25 mmx10mmx0.55 mm thick fixed to the ceiling with G.I. Cleat and steel expansion fastener ceiling section 0.55 mm thick of size 51.50 mmx26mm fixed to the intermediate channels with the help of connecting clip and in the direction of perpendicular to the intermediate channel of 300 mm c/c</p> <p>12.5 mm thick Gypsum plastered board are to be fixed under ceiling section as above by machine screws. The boards are to be joined and finished with jointing compound, paper tape and application of top coat etc. as per the direction of Engineer-in-charge. (The rate includes of cost of all materials including taxes, cost of accessories, fittings and fixtures, scaffolding and labour charges etc. complete)</p>	1	Sqm.	1,159.00	1,159.00
9.30	Ceiling of soft-insulation boards (12mm thick) as per design fitted and fixed complete (excluding the support framework but including necessary wood battens of size 40 mmx25 mm). Sal : Local	1	Sqm.	486.00	486.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.31	Providing P.V.C. False Ceiling made with framework of steel tube of 40mm x 20mm of not less than 18 gauge,the long and cross section will be welded with each other 1000mm to 1200mm apart the entire framework will be fixed in wall using rawlplug or gutties or screws etc. and suspended from ceiling with M.S flat 19mmx3mm as necessary,the entire frame will be painted with red oxide. PRINTED LAMINATED P.V.C Section 150mm x 12mmx 1.00mm (+/- 0.01mm) of approved quality and colour will be fixed on the frame so that the entire framework will not be visible from below P.V.C Section will be fixed with the frame with the help of self tapping steel screws including all materials and labour charges including fitting,fixing the same and hoisting including mending the damages in all respect and cost of paint as required as per direction of Engineer-in-Charge .	1	Sqm	1,394.00	1,394.00
10.0	Aluminium Work :::				
10.1	Supplying concealed type heavy duty PVC headed aluminium tower bolt for double leaf doors as per approved make and brand as per direction of Engineer-in-charge.				
10.1.1	300 mm long	1	Each	74.00	74.00
10.1.2	450 mm long	1	Each	164.00	164.00
10.2	Anodized aluminium barrel / tower / socket bolt (full covered) of approved quality manufactured from extruded section conforming to IS:204/74 fitted & fixed with cadmium plated screw.				
10.2.1	100mm long x 10mm dia bolt.	5	Each	53.00	265.00
10.2.2	150mm x 10mm dia bolt.	5	Each	63.00	315.00
10.2.3	300mm long x 12mm dia bolt.	3	Each	151.00	453.00
10.3	Anodized aluminium aldrops / sliding bolts of approved quality manufactured from extruded section conforming to IS specification) (IS : 2681 / 66) fitted and fixed complete.				
10.3.1	300mm x 16mm dia bolt.	3	Each	231.00	693.00
10.4	Anodised aluminium D-type handle of approved quality manufactured from extruded section conforming to I.S. Specification (I.S. 230/72) fitted and fixed complete. With continuous base plate (Hexagonal/ Round rod)				
10.4.1	i) 100 mm grip x 10 mm dia rod.	4	Each	69.00	276.00
10.4.2	ii) 150 mm grip x 12 mm dia rod.	4	Each	111.00	444.00
10.5	Supplying, fitting and fixing heavy duty hydraulic (oil check) double action floor door spring along with top pin/set of pivots conforming to IS: 6315, with brass shoe, brass top centre aluminium top cover etc complete set as per direction of Engineer in charge. Make: Godrej or approved equivalent.	1	Each Set	3573.00	3,573.00
10.6	Supplying heavy duty top pin/set of pivots of local make and approved by the Engineer-in-charge. (This item to be provided where floor spring not used)	2	Pair	297.00	594.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
10.7	Supplying EPDM gasket of approved make and brand as per direction of Engineer in charge.				
10.7.1	EPDM/ weather gasket for outer frame and mullion	30	Mtr	15.00	450.00
10.7.2	Weather gasket/ wool pile for door vertical.	20	Mtr	19.00	380.00
10.8	Supplying 4 lever mortice lock of any approved make and brand as per direction of the Engineer-in-charge. 150 mm	1	Each	378.00	378.00
10.9	Supplying aluminium casted body hydraulic door closer as per ISI	1	Each	635.00	635.00
10.10	Supplying 250 mm long Heavy Type Aluminium window Peg stay	5	Each	55.00	275.00
10.11	Supplying Heavy duty aluminium handle (EBCO type) natural white	5	Each	96.00	480.00
10.12	Supplying Aluminium casted body Butt Hinge (KOBRA type) (Natural white).	5	Each Set	56.00	280.00
10.13	Supplying stainless steel frictional hinge for casement window as per approved brand as directed by Engineer-in-charge.				
10.13.1	250mm long	2	Pair	302.00	604.00
10.13.2	300mm long	2	Pair	332.00	664.00
10.14	Removing aluminium door and window frame/ shutters positioning & re-fixing the same after repairing supply of necessary materials excluding aluminium section, glass, floor spring, rubber, felt, fitting & fixtures etc.	5	Sqm.	82.00	410.00
10.15	Repairing of shutters & outer frames of aluminium windows (excluding glass and gasket) after removing the existing damaged shutters and re-fixing the same in position after cutting (if necessary).	2	Each	275.00	550.00
10.16	Supplying PVC rollers for sliding windows as per direction of Engineer in charge	10	Each	14.00	140.00
10.17	Supplying anodized aluminium extruded section box hinge for casement window as per approved brand and make directed by Engineer-in-charge (natural white).	10	Each	44.00	440.00
10.18	Supplying & fitting Zinc powered coated star lock (Natural White)	10	Each	40.00	400.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
10.19	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 to be paid for separately) :				
10.19.1	For fixed portion Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	5	Kg	374.80	1,874.00
10.19.2	For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	1	Kg	403.40	403.40
10.20	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing & fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
10.20.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	5	Kg	453.90	2,269.50
10.20.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	1	Kg	483.00	483.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
11.0	Miscellaneous Works :::				
11.1	Supplying at site or stackyard or as directed PCC (1:2:4) Fencing Post 215 cm x 150 mm x 150 mm section at bottom, 100 mm x 100 mm section at top with T-Base 300 mm x 150 mm x 100 mm, having 4 nos 6 mm dia vertical M.s. reinforcement and 6 mm dia binders @ 200 mm centres, finished smooth etc. complete.	1	Each	451.00	451.00
11.2	Supply, fitting & fixing G.I. chain link fencing 75 mm x 75 mm x mesh 12 SWG to the RCC posts, wooden posts or iron posts with galvanized hooks or staples etc. complete as per direction.	1	Sqm.	169.00	169.00
11.3	Supplying, fitting and fixing in position fibre glass panes of approved quality with resin, nail, clip etc. as per IS:12866-1989. (In all floors for internal wall & upto 6 m height for external wall)				
11.3.1	1.2 mm thick (1.85 Kg/Sq.m)	1	Sqm.	527.00	527.00
11.3.2	1.6 mm thick (2.5 Kg/Sq.m)	1	Sqm.	693.00	693.00
11.3.3	2.0 mm thick (3.36 Kg/Sq.m)	1	Sqm.	939.00	939.00
11.3.4	3.0 mm thick (5.10 Kg/Sq.m)	1	Sqm.	1,381.00	1,381.00
11.3.5	4.0 mm thick (6.72 Kg/Sq.m)	1	Sqm.	1,719.00	1,719.00
11.3.6	6.0 mm thick (10.0 Kg/Sq.m)	1	Sqm.	2,583.00	2,583.00
11.4	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.	25	Mtr.	13.92	348.00
11.5	Providing and applying of Silicon Sealant in construction joint, window glass, polycarbonate sheets to make joints water tight, after racking out of joints/ cracks wherever necessary & thorough cleaning at different levels.	5	Cartridge	275.00	1,375.00
11.6	Extra rate for using water proofing and plasticising admixture @ 0.2% by weight of cement (or at manufacturer's specified rate) for concrete of various grades or plaster.	10	Kg.	119.00	1,190.00
11.7	Labour rates per day.				
11.7.1	a) Skilled (Mason/ Carpenter/ Fitter/ Painter/ Plumber/ Santras).	25	Each	447.00	11,175.00
11.7.2	b) Unskilled (Helper).	50	Each	369.00	18,450.00
11.8	Materials delivered and stacked at site as per direction of Engg.-in-charge.				
11.8.1	Bricks (1st Class)	50	Nos	12.00	600.00
11.8.2	Medium Sand	0.5	Cum.	1,978.00	989.00
11.8.3	Silver Sand	0.5	Cum.	848.00	424.00
11.8.4	Coarse Aggregate (Pakur variety) 20mm size	0.5	Cum.	2,826.00	1,413.00
11.8.5	Coarse Aggregate (Pakur variety) 10mm size	0.5	Cum.	2,543.00	1,271.50
11.8.6	White Cement	25	Kg.	25.00	625.00
11.8.7	Reinforcement (TMT Bar) Tor Steel Rods/HYSD/Fe 415/Fe 500/Fe 500 D (Other than SAIL/TATA/RINL)	25	Kg.	58.00	1,450.00
11.8.8	Cement OPC/ PSC/ PPC (53 Grade)	50	Kg.	7.00	350.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
11.9	Supplying, fitting and fixing C.I. Grating (heavy Type)				
11.9.1	Upto 100mm square or 100 mm Dia	5	Each	69.00	345.00
11.9.2	Above 100mm and upto 150mm square or round	5	Each	108.00	540.00
11.10	Providing and applying micro concrete of approved make as per manufacturer"s specification over RCC work or brick work including cleaning the existing surface , curing etc all complete as per instruction of Engineer - in - Charge.	30	Kg	28.00	840.00
11.11	Cleaning compound premises of shrubs, plants, jungles etc by cutting and removing as directed (Specific permission of Engineer-In-Charge prior to execution will be necessary). (Payment to be made on area cleared)	50	Sqm	11.00	550.00
11.12	Supplying and affixing optically clear polyester sun control window film (3 M) having acrylic pressure sensitive adhesive on one side & an acrylic abrasion resistant coating on the other, with composition of infrared absorbing carbon & free from any optical defect. The film characteristics should conform to ASTM E308, ASTM E903, ASTM E84 and ASHIRAE. The film should be pasted after preparatory works without any cracking, delamination, bubbling, discolouring and variation in total transmission of light across the width at any portion along the length doesn't exceed 2% over the average including scaffolding & relevant others to complete in all respect as per manufacturer's specification & direction of Engineer -in-Charge. Note: This work should not be executed without specific permission of Superintending Engineer) Material to be used: M/S Garware Polyester limited or approved equivalent.				
11.12.1	(a) Normal Quality : Film Thickness - 1.0 Mil, Glare Reduction > 45%, U factor < 1.15	1	Sqm	326.00	326.00
11.12.2	b) Superior Quality : Film Thickness - 2.0 Mil, Glare Reduction > 75%, U factor < 1.03, Emissivity < 0.70	1	Sqm	544.00	544.00

Cost of Civil work (BITM) ::: 3,61,780.83
Say Rs. 3,61,781.00

BILL OF QUANTITIES (PLUMBING & SANITARY WORK)

**Name of work: Annual maintenance contract for Civil, Sanitary & Plumbing works
at BITM, Kolkata for the year 2020-2021.**

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.0	G.I./ P.V.C. Pipe works and its Fittings :::				
1.1	Supplying, fitting & fixing G.I. pipe TATA make with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbow, nipple, long screw reducing socket, reducing tees, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respects including cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position <i>above ground</i> .				
1.1.1	15mm dia medium quality.	1	Mtr.	192.00	192.00
1.1.2	20mm dia medium quality.	1	Mtr.	226.00	226.00
1.1.3	25mm dia medium quality.	1	Mtr.	305.00	305.00
1.1.4	32mm dia medium quality.	1	Mtr.	355.00	355.00
1.1.5	40mm dia medium quality.	1	Mtr.	415.00	415.00
1.1.6	50mm dia medium quality.	1	Mtr.	540.00	540.00
1.1.7	65mm dia medium quality.	1	Mtr.	665.00	665.00
1.1.8	80mm dia medium quality.	1	Mtr.	818.00	818.00
1.2	Supplying, fitting & fixing in position G.I. pipes TATA make for <i>underground works</i> with all necessary accessories specials viz socket, bend, tee, unions, cross, elbows, nipple short piece etc. including cost of materials, jointing materials, cutting pipes, making threads, cutting trenches upto 1.5 metre below surface in all sorts of soils and refilling the same as directed with two coats of painting on G.I. pipes & specials with bituminous paint complete in all respect.				
1.2.1	15mm dia medium quality.	1	Mtr.	214.00	214.00
1.2.2	20mm dia medium quality.	1	Mtr.	240.00	240.00
1.2.3	25mm dia medium quality.	1	Mtr.	319.00	319.00
1.2.4	32mm dia medium quality.	1	Mtr.	354.00	354.00
1.2.5	40mm dia medium quality.	1	Mtr.	400.00	400.00
1.2.6	50mm dia medium quality.	1	Mtr.	520.00	520.00
1.2.7	65mm dia medium quality.	1	Mtr.	645.00	645.00
1.2.8	80mm dia medium quality.	1	Mtr.	798.00	798.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.3	Labour for fitting and fixing high density poly-ethylene pipes or PVC pipes including cost of jointing materials, paints etc., fitting and fixing all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrow, reducing socket, reducing tee, short piece etc., cutting pipes, making threads, cutting holes in walls or R.C.C floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost of fitting and fixing holder bat clamps complete in all respect in any position <i>above ground</i> as per direction of the Engineer-in-charge. (Payment will be made on the centre line measurements of total pipe line including all specials).				
1.3.1	15 mm dia.	6	Mtr.	26.00	156.00
1.3.2	20 mm dia.	6	Mtr.	27.00	162.00
1.3.3	25 mm dia.	15	Mtr.	28.00	420.00
1.3.4	32 mm dia.	3	Mtr.	28.00	84.00
1.3.5	40 mm dia.	3	Mtr.	37.00	111.00
1.3.6	50 mm dia.	6	Mtr.	40.00	240.00
1.3.7	65 mm dia.	3	Mtr.	47.00	141.00
1.3.8	75 mm dia. / 80 mm dia.	3	Mtr.	56.00	168.00
1.4	Labour for fitting and fixing high density poly-ethylene pipes or PVC pipes including cost of jointing materials, paints etc., fitting and fixing all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrow, reducing socket, reducing tee, short piece etc., cutting pipes, making threads, cutting holes in walls or R.C.C floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost of fitting and fixing holder bat clamps complete in all respect for <i>under ground work</i> including cutting trenches upto 1.5 metre and refilling the same complete as per direction of the Engineer-in-charge. (Payment will be made on the centre line measurements of total pipe line including all specials).				
1.4.1	15 mm dia.	6	Mtr.	42.00	252.00
1.4.2	20 mm dia.	6	Mtr.	42.00	252.00
1.4.3	25 mm dia.	15	Mtr.	42.00	630.00
1.4.4	32 mm dia.	3	Mtr.	42.00	126.00
1.4.5	40 mm dia.	3	Mtr.	47.00	141.00
1.4.6	50 mm dia.	6	Mtr.	60.00	360.00
1.4.7	65 mm dia.	3	Mtr.	71.00	213.00
1.4.8	75 mm dia. / 80 mm dia.	3	Mtr.	85.00	255.00
1.5	Supply & fixing of galvanised iron socket with I.S.I. mark				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.5.1	15 mm dia.	1	Each	15.00	15.00
1.5.2	20 mm dia.	1	Each	22.00	22.00
1.5.3	25 mm dia.	1	Each	32.00	32.00
1.5.4	32 mm dia.	1	Each	45.00	45.00
1.5.5	40 mm dia.	1	Each	60.00	60.00
1.5.6	50 mm dia.	1	Each	92.00	92.00
1.5.7	65 mm dia.	1	Each	161.00	161.00
1.5.8	80 mm dia.	1	Each	226.00	226.00
1.6	Supply & fixing of galvanised iron Jamnut				
1.6.1	15 mm dia.	1	Each	10.00	10.00
1.6.2	20 mm dia.	1	Each	12.00	12.00
1.6.3	25 mm dia.	1	Each	20.00	20.00
1.6.4	32 mm dia.	1	Each	32.00	32.00
1.6.5	40 mm dia.	1	Each	35.00	35.00
1.6.6	50 mm dia.	1	Each	60.00	60.00
1.6.7	65 mm dia.	1	Each	84.00	84.00
1.6.8	80 mm dia.	1	Each	130.00	130.00
1.7	Supply & fixing of GI plug				
1.7.1	15 mm dia.	1	Each	10.00	10.00
1.7.2	20 mm dia.	1	Each	19.00	19.00
1.7.3	25 mm dia.	1	Each	27.00	27.00
1.7.4	32 mm dia.	1	Each	43.00	43.00
1.7.5	40 mm dia.	1	Each	55.00	55.00
1.7.6	50 mm dia.	1	Each	86.00	86.00
1.7.7	65 mm dia.	1	Each	107.00	107.00
1.7.8	80 mm dia.	1	Each	158.00	158.00
1.8	Supply and fixing of G.I. reducing socket with ISI mark.				
1.8.1	20 mm dia.	1	Each	24.00	24.00
1.8.2	25 mm dia.	1	Each	34.00	34.00
1.8.3	32 mm dia.	1	Each	50.00	50.00
1.8.4	40 mm dia.	1	Each	66.00	66.00
1.8.5	50 mm dia.	1	Each	101.00	101.00
1.8.6	65 mm dia.	1	Each	177.00	177.00
1.8.7	80 mm dia.	1	Each	248.00	248.00
1.9	Supply and fixing of G.I. bend.				
1.9.1	15 mm dia.	1	Each	34.00	34.00
1.9.2	20 mm dia.	1	Each	52.00	52.00
1.9.3	25 mm dia.	1	Each	83.00	83.00
1.9.4	32 mm dia.	1	Each	154.00	154.00
1.9.5	40 mm dia.	1	Each	214.00	214.00
1.9.6	50 mm dia.	1	Each	360.00	360.00
1.9.7	65 mm dia.	1	Each	835.00	835.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.9.8	80 mm dia.	1	Each	1,463.00	1,463.00
1.10	Supply of G.I. plain equal elbow of approved brand and make				
1.10.1	15 mm dia.	1	Each	16.00	16.00
1.10.2	20 mm dia.	1	Each	26.00	26.00
1.10.3	25 mm dia.	1	Each	44.00	44.00
1.10.4	32 mm dia.	1	Each	66.00	66.00
1.10.5	40 mm dia.	1	Each	89.00	89.00
1.10.6	50 mm dia.	1	Each	139.00	139.00
1.10.7	65 mm dia.	1	Each	236.00	236.00
1.10.8	80 mm dia.	1	Each	365.00	365.00
1.11	Supply and fixing of G.I. plain tee of approved brand and make.				
1.11.1	15 mm dia.	1	Each	25.00	25.00
1.11.2	20 mm dia.	1	Each	41.00	41.00
1.11.3	25 mm dia.	1	Each	61.00	61.00
1.11.4	32 mm dia.	1	Each	87.00	87.00
1.11.5	40 mm dia.	1	Each	119.00	119.00
1.11.6	50 mm dia.	1	Each	189.00	189.00
1.11.7	65 mm dia.	1	Each	302.00	302.00
1.11.8	80 mm dia.	1	Each	420.00	420.00
1.12	Supply and fixing of G.I. reducing tee of approved brand and make.				
1.12.1	20 mm x 15 mm	1	Each	45.00	45.00
1.12.2	25 mm x 15 mm / 20 mm	1	Each	67.00	67.00
1.12.3	32 mm x 15 mm / 20 mm / 25 mm	1	Each	96.00	96.00
1.12.4	40 mm x 15 mm / 20 mm / 25 mm / 32 mm	1	Each	131.00	131.00
1.12.5	50 mm x 15 mm / 20 mm / 25 mm / 32 mm / 40 mm	1	Each	208.00	208.00
1.12.6	65 mm x 50 mm	1	Each	332.00	332.00
1.12.7	80 mm x 50 mm	1	Each	461.00	461.00
1.13	Supply and fixing long screw (150mm long) of TATA make with sockets (TATA make) and jamnut.				
1.13.1	15 mm dia.	1	Each	32.00	32.00
1.13.2	20 mm dia.	1	Each	45.00	45.00
1.13.3	25 mm dia.	1	Each	59.00	59.00
1.13.4	32 mm dia.	1	Each	74.00	74.00
1.13.5	40 mm dia.	1	Each	98.00	98.00
1.13.6	50 mm dia.	1	Each	140.00	140.00
1.13.7	65 mm dia.	1	Each	284.00	284.00
1.13.8	80 mm dia.	1	Each	318.00	318.00
1.14	Supply and fixing G.I. union.				
1.14.1	15 mm dia.	1	Each	45.00	45.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.14.2	20 mm dia.	1	Each	69.00	69.00
1.14.3	25 mm dia.	1	Each	96.00	96.00
1.14.4	32 mm dia.	1	Each	140.00	140.00
1.14.5	40 mm dia.	1	Each	172.00	172.00
1.14.6	50 mm dia.	1	Each	263.00	263.00
1.14.7	65 mm dia.	1	Each	516.00	516.00
1.14.8	80 mm dia.	1	Each	728.00	728.00
1.15	Supply and fixing of G.I. short piece of TATA make (Above 50 mm & upto 150 mm)				
1.15.1	15 mm dia.	1	Each	46.00	46.00
1.15.2	20 mm dia.	1	Each	60.00	60.00
1.15.3	25 mm dia.	1	Each	73.00	73.00
1.15.4	32 mm dia.	1	Each	76.00	76.00
1.15.5	40 mm dia.	1	Each	102.00	102.00
1.15.6	50 mm dia.	1	Each	126.00	126.00
1.15.7	65 mm dia.	1	Each	175.00	175.00
1.15.8	80 mm dia.	1	Each	213.00	213.00
1.16	Supply and fixing of G.I. reducing elbow of approved brand and make.				
1.16.1	20 mm x 15 mm	1	Each	28.00	28.00
1.16.2	25 mm x 15 mm / 20 mm	1	Each	48.00	48.00
1.16.3	32 mm x 15 mm / 20 mm / 25 mm	1	Each	74.00	74.00
1.16.4	40 mm x 15 mm / 20 mm / 25 mm / 32 mm	1	Each	99.00	99.00
1.16.5	50 mm x 15 mm / 20 mm / 25 mm / 32 mm / 40 mm	1	Each	153.00	153.00
1.16.6	65 mm x 50 mm	1	Each	260.00	260.00
1.16.7	80 mm x 50 mm	1	Each	400.00	400.00
1.17	Labour for fitting and fixing GI specials including cost of jointing materials. Plug, Socket, Reducing socket, Bend, Plain equal elbow, Reducing elbow, Nipple, Short piece, Plain tee, Reducing tee, jam nut, union, long screw, cross etc.				
1.17.1	(i) Upto 25 mm dia	1	Each	7.00	7.00
1.17.2	(ii) Above 25 mm upto 50 mm dia	1	Each	10.00	10.00
1.17.3	(iii) Above 50 mm upto 80 mm dia	1	Each	11.00	11.00
1.18	Labour for dismantling/ refixing G.I. pipe with fittings.				
1.18.1	Upto 32mm dia.	1	Mtr.	6.00	6.00
1.18.2	Above 32mm & upto 65mm dia.	1	Mtr.	8.00	8.00
1.18.3	Above 65mm & upto 100mm dia.	1	Mtr.	11.00	11.00
1.19	Supplying , fitting and fixing Gun metal check valve tested to 21 Kg per Sq. cm.				
1.19.1	Vertical check valve - 50 mm dia.	1	Each	1447.00	1,447.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.19.2	Horizontal check valve - 50 mm dia.	1	Each	2203.00	2,203.00
1.20	Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq.cm (for water lines only) ISI standered.				
1.20.1	80 mm	1	Each	5591.00	5,591.00
1.20.2	65 mm	1	Each	3929.00	3,929.00
1.20.3	50 mm	1	Each	2277.00	2,277.00
1.20.4	40 mm	1	Each	1590.00	1,590.00
1.20.5	32 mm	1	Each	1160.00	1,160.00
1.20.6	25 mm	2	Each	778.00	1,556.00
1.20.7	20 mm	2	Each	604.00	1,208.00
1.21	Opening out leaky water supply pipe and making the joints water tight including cutting threads where necessary.				
1.21.1	Upto 40mm dia.	5	Each	59.00	295.00
1.21.2	50mm dia.	5	Each	69.00	345.00
1.21.3	65mm to 100mm dia.	5	Each	113.00	565.00
1.22	Dismantling and refixing bib cock or stop cock				
1.22.1	15 mm	25	Each	12.00	300.00
1.22.2	20 mm	25	Each	16.00	400.00
1.23	Rewashing stopcock / bibcock / pushcock / pillar cock including gland packing if necessary.				
1.23.1	15mm	50	Each	13.00	650.00
1.23.2	25mm	10	Each	17.00	170.00
1.24	Renewing brass spindle and valve of stopcock / bibcock / pushcock / pillarcock - 15 mm	20	Each	74.00	1,480.00
1.25	Supply of PVC pipes of approved make (medium duty/ schedule-80) conforming to ASTM D-1785 and threaded to match with GI pipes as per IS: 1239 (Part-I).				
1.25.1	15 mm dia.	12	Mtr.	61.00	732.00
1.25.2	20 mm dia.	12	Mtr.	83.00	996.00
1.25.3	25 mm dia.	30	Mtr.	121.00	3,630.00
1.25.4	32 mm dia.	6	Mtr.	169.00	1,014.00
1.25.5	40 mm dia.	6	Mtr.	207.00	1,242.00
1.25.6	50 mm dia.	12	Mtr.	282.00	3,384.00
1.25.7	65 mm dia.	6	Mtr.	456.00	2,736.00
1.25.8	80 mm dia.	6	Mtr.	578.00	3,468.00
1.26	Supply and fixing of PVC socket.				
1.26.1	15 mm dia.	5	Each	10.00	50.00
1.26.2	20 mm dia.	5	Each	14.00	70.00
1.26.3	25 mm dia.	5	Each	23.00	115.00
1.26.4	32 mm dia.	1	Each	33.00	33.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.26.5	40 mm dia.	2	Each	42.00	84.00
1.26.6	50 mm dia.	5	Each	53.00	265.00
1.26.7	65 mm dia.	1	Each	111.00	111.00
1.26.8	80 mm dia.	1	Each	180.00	180.00
1.27	Supply and fixing of PVC elbow.				
1.27.1	15 mm dia.	5	Each	13.00	65.00
1.27.2	20 mm dia.	5	Each	18.00	90.00
1.27.3	25 mm dia.	5	Each	27.00	135.00
1.27.4	32 mm dia.	1	Each	41.00	41.00
1.27.5	40 mm dia.	2	Each	69.00	138.00
1.27.6	50 mm dia.	5	Each	113.00	565.00
1.27.7	65 mm dia.	1	Each	165.00	165.00
1.27.8	80 mm dia.	1	Each	266.00	266.00
1.28	Supply and fixing of PVC Tee.				
1.28.1	15 mm dia.	5	Each	14.00	70.00
1.28.2	20 mm dia.	5	Each	23.00	115.00
1.28.3	25 mm dia.	5	Each	36.00	180.00
1.28.4	32 mm dia.	1	Each	56.00	56.00
1.28.5	40 mm dia.	2	Each	99.00	198.00
1.28.6	50 mm dia.	5	Each	125.00	625.00
1.28.7	65 mm dia.	1	Each	241.00	241.00
1.28.8	80 mm dia.	1	Each	349.00	349.00
1.29	Supply and fixing of PVC threaded Adopter (FT/MT).				
1.29.1	15 mm dia.	5	Each	11.00	55.00
1.29.2	20 mm dia.	5	Each	15.00	75.00
1.29.3	25 mm dia.	5	Each	19.00	95.00
1.29.4	32 mm dia.	1	Each	38.00	38.00
1.29.5	40 mm dia.	2	Each	68.00	136.00
1.29.6	50 mm dia.	5	Each	94.00	470.00
1.29.7	65 mm dia.	1	Each	113.00	113.00
1.29.8	80 mm dia.	1	Each	131.00	131.00
1.30	Supply and fixing of PVC Reducing Tee.				
1.30.1	20 mm x 15 mm	2	Each	37.00	74.00
1.30.2	25 mm x 15 mm	2	Each	43.00	86.00
1.30.3	25 mm x 20 mm	2	Each	47.00	94.00
1.30.4	40 mm x 15 mm	2	Each	101.00	202.00
1.30.5	40 mm x 20 mm	2	Each	102.00	204.00
1.30.6	40 mm x 25 mm	2	Each	74.00	148.00
1.30.7	40 mm x 32 mm	2	Each	153.00	306.00
1.30.8	50 mm x 25 mm	1	Each	210.00	210.00
1.30.9	50 mm x 32 mm	1	Each	181.00	181.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.30.10	65 mm x 40 mm	1	Each	302.00	302.00
1.30.11	65 mm x 50 mm	1	Each	295.00	295.00
1.30.12	80 mm x 25 mm	1	Each	468.00	468.00
1.31	Supply and fixing of PVC Reducing socket.				
1.31.1	20 mm x 15 mm	2	Each	15.00	30.00
1.31.2	25 mm x 15 mm	2	Each	26.00	52.00
1.31.3	25 mm x 20 mm	2	Each	23.00	46.00
1.31.4	32 mm x 25 mm	2	Each	30.00	60.00
1.31.5	40 mm x 25 mm	2	Each	71.00	142.00
1.31.6	40 mm x 32 mm	2	Each	43.00	86.00
1.31.7	50 mm x 25 mm	2	Each	137.00	274.00
1.31.8	50 mm x 40 mm	2	Each	66.00	132.00
1.31.9	65 mm x 40 mm	1	Each	114.00	114.00
1.31.10	65 mm x 50 mm	1	Each	117.00	117.00
1.31.11	80 mm x 40 mm	1	Each	136.00	136.00
1.31.12	80 mm x 50 mm	1	Each	141.00	141.00
1.31.13	80 mm x 65 mm	1	Each	151.00	151.00
1.32	Supply and fixing of PVC Threaded end cap.				
1.32.1	15 mm dia.	1	Each	10.00	10.00
1.32.2	20 mm dia.	1	Each	14.00	14.00
1.32.3	25 mm dia.	1	Each	18.00	18.00
1.32.4	32 mm dia.	1	Each	23.00	23.00
1.32.5	40 mm dia.	1	Each	34.00	34.00
1.32.6	50 mm dia.	1	Each	46.00	46.00
1.32.7	65 mm dia.	1	Each	70.00	70.00
1.32.8	80 mm dia.	1	Each	85.00	85.00
1.33	Supply and fixing of PVC Union.				
1.33.1	15 mm dia.	2	Each	28.00	56.00
1.33.2	20 mm dia.	2	Each	41.00	82.00
1.33.3	25 mm dia.	2	Each	56.00	112.00
1.33.4	32 mm dia.	2	Each	85.00	170.00
1.33.5	40 mm dia.	2	Each	122.00	244.00
1.33.6	50 mm dia.	2	Each	150.00	300.00
1.34	Supply and fixing of PVC Flange.				
1.34.1	50 mm dia.	1	Pair	160.00	160.00
1.34.2	65 mm dia.	1	Pair	253.00	253.00
1.34.3	80 mm dia.	1	Pair	310.00	310.00
1.35	Supply and fixing of PVC Reducing Elbow.				
1.35.1	25 mm x 15 mm	1	Each	67.00	67.00
1.35.2	25 mm x 20 mm	1	Each	63.00	63.00
1.35.3	80 mm x 50 mm	1	Each	235.00	235.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.36	Renewing C.I. clamp for pipe including cutting hole in wall etc				
1.36.1	25 mm	10	Each	32.00	320.00
1.36.2	32 mm	10	Each	45.00	450.00
1.36.3	40 mm	1	Each	46.00	46.00
1.36.4	50 mm	1	Each	58.00	58.00
1.36.5	80 mm	1	Each	127.00	127.00
1.37	Supplying & fixing P.V.C. clip.				
1.37.1	20 mm	10	Each	4.00	40.00
1.37.2	25 mm	10	Each	5.00	50.00
1.37.3	32 mm	10	Each	8.00	80.00
1.37.4	40 mm	10	Each	14.00	140.00
1.37.5	50 mm	5	Each	20.00	100.00
1.38	Removing chokage in G.I. pipe including cleaning pipe.				
1.38.1	Upto 25mm dia.	10	Mtr.	7.00	70.00
1.38.2	Above 25mm & upto 50mm dia.	10	Mtr.	9.00	90.00
1.38.3	Above 50mm & upto 100mm dia.	10	Mtr.	10.00	100.00
1.39	Supplying, fitting and fixing of CPVC Ball Valve conforming to IS-15778 : 2007 of approved make / brand.				
1.39.1	15 mm dia.	1	Each	99.00	99.00
1.39.2	20 mm dia.	2	Each	152.00	304.00
1.39.3	25 mm dia.	2	Each	239.00	478.00
1.39.4	32 mm dia.	1	Each	399.00	399.00
1.39.5	40 mm dia.	1	Each	553.00	553.00
1.39.6	50 mm dia.	1	Each	1,128.00	1,128.00
1.40	Supplying & fixing UPVC Male adaptor brass threaded.				
1.40.1	15 mm dia.	2	Each	105.00	210.00
1.40.2	20 mm dia.	2	Each	139.00	278.00
1.40.3	25 mm dia.	2	Each	220.00	440.00
1.40.4	32 mm dia.	1	Each	321.00	321.00
1.40.5	40 mm dia.	1	Each	348.00	348.00
1.40.6	50 mm dia.	1	Each	598.00	598.00
1.41	Supplying & fixing UPVC Female adaptor brass threaded.				
1.41.1	15 mm dia.	2	Each	75.00	150.00
1.41.2	20 mm dia.	2	Each	103.00	206.00
1.41.3	25 mm dia.	2	Each	192.00	384.00
1.41.4	32 mm dia.	1	Each	273.00	273.00
1.41.5	40 mm dia.	1	Each	406.00	406.00
1.41.6	50 mm dia.	1	Each	576.00	576.00
2.0	Cisterns, P.V.C. tanks etc :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
2.1	Supplying, fitting and fixing 10 lit porcelain low down cistern of approved make with either side or bottom inlet, side overflow, brackets complete with all internal PVC fittings.	1	Each	2,297.00	2,297.00
2.2	Supplying, fitting and fixing 10 ltr. PVC low down cistern conforming to IS specification with PVC fittings complete, C.I. brackets including two coats of painting to bracket etc.	1	Each	1,015.00	1,015.00
2.3	Supplying, fitting and fixing of low down cistern parts of approved make.				
2.3.1	Internal fitting for cistern complete.	2	Each Set	284.00	568.00
2.3.2	Outlet Assembly	2	Each	279.00	558.00
2.3.3	Inlet assembly	5	Each	64.00	320.00
2.3.4	Knob	2	Each	304.00	608.00
2.4	Renewing high pressure polythene ball cock of approved quality with polythene ball and aluminium lever complete for pipe of dia.				
2.4.1	i) 15mm	2	Each	71.00	142.00
2.4.2	ii) 20mm	2	Each	86.00	172.00
2.4.3	ii) 25mm	2	Each	120.00	240.00
2.5	Dismantling ball cock and re-fixing same after repairs including straightening lever and renewing split pin.				
2.5.1	15 mm dia.	5	Each	28.00	140.00
2.5.2	20 mm dia.	5	Each	33.00	165.00
2.5.3	25 mm dia.	5	Each	36.00	180.00
2.6	Changing the lather only of syphon of automatic cistern including taking out and refixing necessary parts.	10	Each	39.00	390.00
2.7	Supply, fitting and fixing PVC water storage tank of approved quality with closed top with lid. (Black) Multi layer.				
2.7.1	a) 500 Ltr. Capacity	1	Each	2,584.00	2,584.00
2.7.2	b) 1000 Ltr. Capacity.	1	Each	5,128.00	5,128.00
2.7.3	c) 2000 Ltr. Capacity		Each	10,434.00	0.00
2.8	Cleaning and removing mud upto 2000 litre Water Tank including masonry reservior.	50	Each	110.00	5,500.00
2.9	Cleaning and removing mud above 2000 litre Water Tank including masonry reservior.	100	Cum	67.00	6,700.00
3.0	Wash Basins, Sinks etc and Fittings :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.1	Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75mm x 75mm x 75mm. Wooden blocks C.P. waste fittings of 32mm dia, one approved quality brass C.P. pillar cock of 15mm dia, C.P. china with rubber plug of 30mm dia., approved quality PVC waste pipe with C.P. nut 32mm dia, 900mm long approved quality PVC connection pipe with heavy brass C.P. nut 300mm long including mending good all damages and painting the brackets with two coats of approved paints.				
3.1.1	550mm x 400mm size.	1	Each	2,208.00	2,208.00
3.1.2	630mm x 450 mm size.	1	Each	3,260.00	3,260.00
3.2	Supplying, fitting and fixing pedestal of approved make for wash basin.	1	Each	1,497.00	1,497.00
3.3	White vitreous china sink supplied, fitted and fixed in position on C.I. brackets including two coats of painting of brackets. A) Plain edge sink with overflow. (i) 610 mm x 450 mm x 250 mm		Each	5,445.00	0.00
3.4	Supplying, fitting & fixing stainless steel (SS 304 grade) sink complete with waste fittings and two coats of painting C.I. brackets.				
3.4.1	Sink only, 630 mm x 550 mm x 180 mm.	1	Each	3,788.00	3,788.00
3.4.2	Sink with drain board 1050 mm x 450 mm x 180 mm	1	Each	5,006.00	5,006.00
3.5	Supplying, fitting and fixing complete Bottle waste trap (Heavy Quality)				
3.5.1	Chromium plated Bottle trap 32 mm with 190 mm long connecting pipe and wall flange (Equivalent to Code No. 545 & Model - Tropical / Sumthing Special of ESSCO or similar brand).	1	Each	629.00	629.00
3.5.2	PTMT Bottle trap 32 mm with connecting pipe (Prayag or equivalent).	1	Each	443.00	443.00
3.6	Supplying, fitting & fixing approved brand PVC connector white flexible with both end coupling with heavy brass over C.P. nut 15mm. dia				
3.6.1	300 mm long.	2	Each	57.00	114.00
3.6.2	450 mm long.	5	Each	82.00	410.00
3.6.3	600 mm long.	5	Each	107.00	535.00
3.6.4	750 mm long.	2	Each	117.00	234.00
3.6.5	900 mm long.	2	Each	147.00	294.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.7	Supplying, fitting and fixing approved brand 32 mm dia. P.V.C. waste pipe, with PVC coupling at one end fitted with necessary clamps.				
3.7.1	600 mm long.	2	Each	47.00	94.00
3.7.2	750 mm long.	2	Each	59.00	118.00
3.7.3	900 mm long.	2	Each	75.00	150.00
3.8	Supplying, fitting and fixing Waste fittings complete.				
3.8.1	C.P. over brass- 32 mm each	5	Each	190.00	950.00
3.8.1	Polythene- 32 mm	5	Each	44.00	220.00
3.8.2	Supply, Fitting & Fixing of 32 mm PVC Waste Nozzle with jamnut, full thread or half thread complete for wash basin/ urinal.	5	Each	48.00	240.00
3.8.3	Flexible waste pipe of 32 mm dia. for wash basin / urinal outlet.	5	Mtr.	22.00	110.00
3.9	Supplying, fitting and fixing C.I. bracket including two coats of painting				
	a) Wash basin, Dental spitton	2	Each	135.00	270.00
	(b) Sink, Drain board	2	Each	149.00	298.00
	(c) Cistern	2	Each	94.00	188.00
3.10	Supplying, fitting and fixing pillar cock, bib cock & stop cock of approved make.				
3.10.1	CP Pillar Cock Super Deluxe with Aerator - 15 mm. (Equivalent to Code No. 508 & Model No. Tropical / Sumthing Special of ESSCO or similar brand).	3	Each	592.00	1,776.00
3.10.2	PTMT Pillar cock (Prayag or equivalent)- 15 mm	5	Each	222.00	1,110.00
3.10.3	Chromium plated Bib Cock short body (Equivalent to Code No. 511 & Model - Tropical/ Sumthing Special of ESSCO or similar brand)	3	Each	539.00	1,617.00
3.10.4	Chromium plated Bib Cock long body with wall flange with aerator (Equivalent to Code No. 512 & Model - Tropical/ Sumthing Special of ESSCO or similar brand)	3	Each	659.00	1,977.00
3.10.5	Chromium plated Bib Cock (angular shape with wall flange) (Equivalent to Code No. 5037/ 5047 & Model - Florentine of Jaquar or similar brand)	2	Each	861.00	1,722.00
3.10.6	Chromium plated angular Stop Cock with wall flange (Equivalent to Code No. 5053 & Model - Florentine of Jaquar or similar brand).	2	Each	815.00	1,630.00
3.10.7	Chromium plated concealed Stop Cock heavy duty (Equivalent to Code No. 5083 & Model - Florentine of Jaquar or similar brand).	2	Each	953.00	1,906.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.10.8	PTMT(Polytetra) Bib Cock / Stop Cock (Prayag or equivalent)- 15mm.	5	Each	154.00	770.00
3.10.9	Supplying, fitting and fixing alloy iron with brass spindle bib cock/ stop cock of approved brand and make, spray painted and tested to 21 kg per sq.cm. - 15 mm.	1	Each	169.00	169.00
3.10.10	Chromium plated round shower with revolving joint 100 mm dia with rubid cleaning system (Equivalent to Code No. 542(N) & Model - Tropical / Sumthing Special of ESSCO or similar brand)	1	Each	452.00	452.00
3.10.11	Hand Shower (Health Faucet) with 1mtr Flexible Tube with Wall Hook(Equivalent to Code No.573 & Model -ALLIED of Jaquar or similar)	1	Each	1,251.00	1,251.00
3.10.12	CP 2-way bib Cock - 15 mm, supplied, fitted and fixed. (Code No.5041 & Model - FLORENTINE of JAQUAR or similar brand).	1	Each	1,269.00	1,269.00
3.10.13	Supplying, fitting and fixing 15 mm swan neck tap with left & right hand operating nob with aerator (Equivalent to Code No. 510, 510(A) and Model - TROPICAL / SUMTHING SPECIAL of ESSCO or similar brand)	1	Each	811.00	811.00
3.11	Supplying, fitting and fixing C.P. Extension pipe	5	Each	106.00	530.00
3.12	Supplying, fitting and fixing C.P. wall flange	5	Each	64.00	320.00
3.13	Re-fixing washbasin with or without waste fittings with brackets.	5	Each	70.00	350.00
3.14	Dismantling was basin with or without waste fitting with brackets.	5	Each	35.00	175.00
3.15	Re-fixing sink with or without waste fittings with brackets. Upto 750 mm length	5	Each	76.00	380.00
3.16	Dismantling sink with or without waste fittings with brackets.				
3.16.1	Upto 450 mm length	5	Each	40.00	200.00
3.16.2	450 mm and upto 600 mm lengt	5	Each	52.00	260.00
3.16.3	bove 600 mm and upto 750 mm length	5	Each	59.00	295.00
3.17	Cleaning wash basin/ sink with acid.	10	Each	16.00	160.00
3.18	Dismatling of pillar cock of wash basin	20	Each	9.00	180.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.18.1	Refixing of pillar cock of wash basin	20	Each	9.00	180.00
3.19	Supplying, fitting and fixing bevelled edged mirror 5.5 mm thick silver red as per I.S. 3438 / 1965 together with brass C.P. hinges. 600 mm X 450 mm	2	Each	484.00	968.00
3.20	Supplying, fitting and fixing liquid soap container.				
3.20.1	Cromium plated.	2	Each	393.00	786.00
3.20.2	PTMT (Prayag or equivalent as approved).	2	Each	210.00	420.00
3.21	Supply, fitting and fixing towel rail with two brackets C.P. over brass- 25 mm dia and 600 mm long.	2	Each	430.00	860.00
3.22	Supplying, fitting and fixing PTMT smart shelf of approved make of size 300 mm.	2	Each	223.00	446.00
4	Inspection Pit, Soak Pit etc :::				
4.1	Construction of circular soaks well 2.5 mtr. deep in all types of sandy soils with drey brickwork upto 1.6 mtr. from the bottom having 150mm intermediate cement brick work (1:4) band all round and cement brick work (1:4) upto 0.90 mtr. from top with 19mm thick cement plastering (4:1) to inside face upto the depth of cement brickwork, 15mm thick cement plaster (4:1) on outer face from top of the well upto G.L. and 6mm thick cement plaster (4:1) on top of the RCC cover slab including filling bottom 1.00 mtr. of inside of the well with brick metal (50mm to 63mm size) including RCC cover slab of 100mm thick with cement concrete (1:1.5:3) with stone chips with necessary reinforcement and shuttering including one 560mm dia RCC manhole cover (heavy type) of approved make supplied, fitted and fixed in the cover slab with necessary fittings making necessary, arrangements for pipe connection, excavation of well including shoring, dewatering and removing the excess earth from the premises as per direction complete in all respect with all costs of labour and materials.				
	With 250mm thick dry brick work and 250mm thick cement brick work (6:1) and 1.00m inside dia. (SAIL/TATA/RINL)		Each	16,577.00	0.00
4.2	Removing sludge from septic tank, soak well etc. by methor labour including disposal of the same outside the compound as directed. Upto 200 users. Beyond a lead of 150 metre and outside the Municipal limit	1	Each	5,695.00	5,695.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
4.3	Cleaning silt of inspection pit.	20	Each	154.00	3,080.00
4.3.1	Cleaning silt of master trap pit.	1	Each	1,152.00	1,152.00
4.4	Supplying, fitting and fixing in position RCC manhole / pit cover of approved make with rim (Heavy Type).				0.00
4.4.1	450mm dia.	1	Each	276.00	276.00
4.4.2	560mm dia.	1	Each	338.00	338.00
4.5	Supplying, fitting and fixing in position C.I manhole / pit cover with rim.				
4.5.1	Round 450mm x 100mm x 25Kg.	1	Each	2,035.00	2,035.00
4.5.2	Round 450mm x 100mm x 50Kg.	1	Each	3,526.00	3,526.00
4.6	Supplying, fitting and fixing in position reinforced cement polymer concrete manhole/ gully pit cover with matching frame as per IS: 12592(M.D)				
4.6.1	Lighty duty gully pit cover (yard gully) with frame and hinge arrangement for opening of size, cover: 300mm x 275mm x 30 mm, Frame: 450mm x 375mm x 75 mm, Opening: 300mm x 225 mm, Weight: 43kg (approx).	1	Each	1,233.00	1,233.00
4.6.2	15 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 460 mm x 75 mm, Frame: 620 mm x 150 mm, Opening: 360mm, Weight: 100 kg (approx).	1	Each	2,536.00	2,536.00
4.6.3	5 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 565 mm x 65 mm, Frame: 665 mm x 125 mm, Opening: 470mm, Weight: 90 kg (approx).	1	Each	2,582.00	2,582.00
4.6.4	3 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 450mm x 50mm, Frame: 540mm x 100mm, Opening: 370mm, Weight: 46kg (approx).	2	Each	1,319.00	2,638.00
5	Soil Pipe and Fittings :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.0	Supplying, fitting and fixing UPVC pipes (B-Type) & fittings conforming to IS:13592-1992 for above ground work including cost of jointing materials, all necessary specials, cutting pipes, cutting holes in wall or RCC floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost and fitting and fixing holder bat clamps (any floor) or for underground work including cutting trenches upto 1.5 metre and refilling the same complete as per direction of the Engineer-in-charge. (Payment will be made on centre line measurement of the total pipeline including specials.)				
5.1	Single socketed 3.0 metre length UPVC pipes - Above ground				
5.1.1	75 mm dia.	6	Mtr.	241.00	1,446.00
5.1.2	110 mm dia.	6	Mtr.	349.00	2,094.00
5.1.3	160 mm dia.	1	Mtr.	612.00	612.00
5.2	Single socketed 3.0 metre length UPVC pipes - Under ground				
5.2.1	75 mm dia.	6	Mtr.	269.00	1,614.00
5.2.2	110 mm dia.	6	Mtr.	376.00	2,256.00
5.2.3	160 mm dia.	1	Mtr.	639.00	639.00
5.3	Coupler				
5.3.1	75 mm dia.	2	Each	46.00	92.00
5.3.2	110 mm dia.	2	Each	85.00	170.00
5.3.3	160 mm dia.	1	Each	261.00	261.00
5.4	Plain Tee				
5.4.1	75 mm dia.	2	Each	46.00	92.00
5.4.2	110 mm dia.	2	Each	85.00	170.00
5.4.3	160 mm dia.	1	Each	262.00	262.00
5.5	Door Tee				
5.5.1	75 mm dia.	2	Each	101.00	202.00
5.5.2	110 mm dia.	2	Each	195.00	390.00
5.5.3	160 mm dia.	1	Each	514.00	514.00
5.6	Bend 45 ⁰				
5.6.1	75 mm dia.	2	Each	54.00	108.00
5.6.2	110 mm dia.	2	Each	89.00	178.00
5.6.3	160 mm dia.	1	Each	293.00	293.00
5.7	Bend 87.5 ⁰				
5.7.1	75 mm dia.	2	Each	61.00	122.00
5.7.2	110 mm dia.	2	Each	120.00	240.00
5.7.3	160 mm dia.	1	Each	338.00	338.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.8	Door Bend (T.S)				
5.8.1	75 mm dia.	2	Each	83.00	166.00
5.8.2	110 mm dia.	2	Each	147.00	294.00
5.8.3	160 mm dia.	1	Each	369.00	369.00
5.9	Plain Y				
5.9.1	75 mm dia.	2	Each	102.00	204.00
5.9.2	110 mm dia.	2	Each	206.00	412.00
5.9.3	160 mm dia.	1	Each	583.00	583.00
5.11	Vent Cowl				
5.11.1	75 mm dia.	2	Each	25.00	50.00
5.11.2	110 mm dia.	2	Each	33.00	66.00
5.11.3	160 mm dia.	1	Each	57.00	57.00
5.10	Pipe Clip				
5.10.1	75 mm dia.	5	Each	16.00	80.00
5.10.2	110 mm dia.	5	Each	21.00	105.00
5.10.3	160 mm dia.	5	Each	43.00	215.00
5.12	Nahani Trap	2	Each	105.00	210.00
5.13	Plain floor trap with Top tile & Strainer - 75 mm	2	Each	144.00	288.00
5.14	Supplying, fitting and fixing with cement jointing (1:3) salt glazed stoneware pipe including excavation of earth upto 1.50mm depth in all sorts of soil both mixed or unmixed and refilling (but excluding concreting at bottom and sides).				
5.14.1	150 mm.	1	Mtr.	334.00	334.00
5.14.2	300 mm.	1	Mtr.	927.00	927.00
5.15	Renewing cast iron inspection door with bolts and nuts complete for fittings of 50mm dia to 150mm dia HCI pipe.	2	Each	86.00	172.00
5.16	Supply, fitting and fixing C.I. round grating.				
5.16.1	100 mm dia.	5	Each	62.00	310.00
5.16.2	150 mm dia.	5	Each	85.00	425.00
5.17	Supply, fitting and fixing C.I. square jalli.				
5.17.1	100 mm.	5	Each	73.00	365.00
5.17.2	150 mm.	5	Each	102.00	510.00
5.17.3	225 mm.	5	Each	142.00	710.00
5.18	Supplying and fixing aluminium domical grating 125mm.	2	Each	56.00	112.00
5.19	Cleaning and removing silt from chocked up gully pit.	5	Each	33.00	165.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.20	Removing chokage of H.C.I. or S.W. pipe or R.C.C. Hume pipe with split bamboo etc.				
5.20.1	a) Underground	100	Mtr.	11.00	1,100.00
5.20.2	b) Over ground	50	Mtr.	9.00	450.00
6.0	Water Closets and Urinals :::				
6.1	Supplying, fitting and fixing EWC in white glazed vitreous chinaware of approved make in position complete with necessary boolts, nuts, etc. With 'S' trap	1	Each	1,512.00	1,512.00
6.2	Supplying, fitting and fixing Anglo-Indian W.C. in white glazed vitreous chinaware of approved make in position complete with necessary boolts, nuts, etc. With 'S' trap (with vent)	1	Each	3,287.00	3,287.00
6.3	Supplying, fitting and fixing Orissa pattern water closet in white glazed vitreous chinaware of approved make in position complete excluding 'P' or 'S' trap (excluding cost of concrete for fixing). (i) 580 mm X 440 mm.	1	Each	1,613.00	1,613.00
6.4	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete.				
	(i) 635 mm X 395 mm X 420 mm	1	Each	2,869.00	2,869.00
	(i) 470 mm X 280 mm X 340 mm	1	Each	945.00	945.00
6.5	Supplying, fitting and fixing 32 mm dia. flush pipe of approved make with necessary fixing materials and clamps complete.				0.00
6.5.1	a) Polythene flush pipe	10	Each	155.00	1,550.00
6.6	Supplying, fitting and fixing 18mm thick marble partition slab with white chawk doongri marbel square cut, both sides polished with two front cover rounded and edges polished.	5	Sqm.	1,426.00	7,130.00
6.7	Supplying, fitting and fixing porcelain partition wall of approved make of size 618 mm x 310 mm complete in all respect	2	Each	1,132.00	2,264.00
6.8	Supplying, fitting and fixing Closet seat of approved make with lid and CP hinges, rubber buffer and brass screws complete.				0.00
6.8.1	For E.W.C. - Plastic (hollow type) white	5	Each	380.00	1,900.00
6.8.2	For Anglo Indian - Plastic (hollow type) white	5	Each	485.00	2,425.00
6.9	Supplying, fitting and fixing porcelain toilet paper holder of approved makewith wooden spindle as necessary. Roll type size 250mm x 125mm.	1	Each	293.00	293.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.10	Supplying, fitting and fixing dome shaped C.P. waste grating for urinals. 32 mm.	5	Each	180.00	900.00
6.11	Dismantling and refixing marble or mosaic partition.	5	Each	100.00	500.00
6.11 A	Dismantling urinal.	10	Each	33.00	330.00
6.11 B	Refixing urinal	10	Each	35.00	350.00
6.12	Removing chokage of water closet, urinal and waste trap.	25	Each	26.00	650.00
6.13	Rectifying leakage of WC by new joints by methor mistry.	10	Each	39.00	390.00
6.14	Renewing 15mm C.P. over brass spreader.	2	Each	295.00	590.00
6.15	Re-fixing flush pipe/ MS bend/ CP flush pipe with I.R. adapter after removing chokages.	5	Each	35.00	175.00
7.0	Miscellaneous :::				
7.1	Repairing peets valve including renewing packing gland, acid wash etc.				
7.1.1	25mm to 40mm valve.	10	Each	38.00	380.00
7.1.2	40mm to 100mm valve.	10	Each	82.50	825.00
7.2	Dismantling and re-fixing of auto flush valve, cascade type cistern after cleaning with acid, changing washers adjusting the same etc. all complete.	10	Each	71.50	715.00
7.3	Supplying, fitting and fixing 15mm dia, 450mm long C.P. connector.	5	Each	165.00	825.00
7.4	Attention automatic cistern of urinal or PVC flushing cisterns of high / low level of adjustment upto 10 ltr, cleaning with acid etc.	10	Each	44.00	440.00
7.5	Dismantling & refixing of Bib cock, Pillar cock, Push cock, Angular, urinal spreader etc. after cleaning with acid, removing of chockage, renewing washer etc all complete.	20	Each	33.00	660.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
7.6	Cleaning rubbish, sludge, weeds scum, liquid earth, mud etc.from road side masonry drain/ hume pipe drain/ culvert etc. by mather labour after removing concrete. Slab/manhole cover etc. without damaging the same and refixing the same properly after cleaning as necessary and removing the sludge etc.etc.by using iron pans, buckets including all labour, tools & plants including removing the spoils in dry condition and disposing the same by truck beyond the road side in conformity with municipal/ corporation rules for such disposal including loading into truck and cleaning the road side in all respects as per direction of the Engineer-in-Charge. (Payment will be made on the basis of actual stack measurment of spoils in dry condition at roadside).	2	Cum.	289.00	578.00

Cost of plumbing and sanitary work (BITM) :::: 2,38,388.00

BILL OF QUANTITIES (PLUMBING & SANITARY WORK)

Name of work: Annual maintenance contract for Civil, Sanitary & Plumbing works at Staff Quarters (Karmi Abas), Kasba, Kolkata for the year 2020-2021.

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.0	G.I./ P.V.C. Pipe works and its Fittings :::				
1.1	Supplying, fitting & fixing G.I. pipe TATA make with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbow, nipple, long screw reducing socket, reducing tees, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respects including cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position <i>above ground</i> .				
1.1.1	15mm dia medium quality.	1	Mtr.	192.00	192.00
1.1.2	20mm dia medium quality.	1	Mtr.	226.00	226.00
1.1.3	25mm dia medium quality.	1	Mtr.	305.00	305.00
1.1.4	32mm dia medium quality.	1	Mtr.	355.00	355.00
1.1.5	40mm dia medium quality.	1	Mtr.	415.00	415.00
1.1.6	50mm dia medium quality.	1	Mtr.	540.00	540.00
1.1.7	65mm dia medium quality.	1	Mtr.	665.00	665.00
1.1.8	80mm dia medium quality.	1	Mtr.	818.00	818.00
1.2	Supplying, fitting & fixing in position G.I. pipes TATA make for <i>underground works</i> with all necessary accessories specials viz socket, bend, tee, unions, cross, elbows, nipple short piece etc. including cost of materials, jointing materials, cutting pipes, making threads, cutting trenches upto 1.5 metre below surface in all sorts of soils and refilling the same as directed with two coats of painting on G.I. pipes & specials with bituminous paint complete in all respect.				
1.2.1	15mm dia medium quality.	1	Mtr.	214.00	214.00
1.2.2	20mm dia medium quality.	1	Mtr.	240.00	240.00
1.2.3	25mm dia medium quality.	1	Mtr.	319.00	319.00
1.2.4	32mm dia medium quality.	1	Mtr.	354.00	354.00
1.2.5	40mm dia medium quality.	1	Mtr.	400.00	400.00
1.2.6	50mm dia medium quality.	1	Mtr.	520.00	520.00
1.2.7	65mm dia medium quality.	1	Mtr.	645.00	645.00
1.2.8	80mm dia medium quality.	1	Mtr.	798.00	798.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.3	Labour for fitting and fixing high density poly-ethylene pipes or PVC pipes including cost of jointing materials, paints etc., fitting and fixing all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrow, reducing socket, reducing tee, short piece etc., cutting pipes, making threads, cutting holes in walls or R.C.C floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost of fitting and fixing holder bat clamps complete in all respect in any position <i>above ground</i> as per direction of the Engineer-in-charge. (Payment will be made on the centre line measurements of total pipe line including all specials).				
1.3.1	15 mm dia.	6	Mtr.	26.00	156.00
1.3.2	20 mm dia.	6	Mtr.	27.00	162.00
1.3.3	25 mm dia.	12	Mtr.	28.00	336.00
1.3.4	32 mm dia.	3	Mtr.	28.00	84.00
1.3.5	40 mm dia.	3	Mtr.	37.00	111.00
1.3.6	50 mm dia.	6	Mtr.	40.00	240.00
1.3.7	65 mm dia.	3	Mtr.	47.00	141.00
1.3.8	75 mm dia. / 80 mm dia.	3	Mtr.	56.00	168.00
1.4	Labour for fitting and fixing high density poly-ethylene pipes or PVC pipes including cost of jointing materials, paints etc., fitting and fixing all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrow, reducing socket, reducing tee, short piece etc., cutting pipes, making threads, cutting holes in walls or R.C.C floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost of fitting and fixing holder bat clamps complete in all respect for <i>under ground work</i> including cutting trenches upto 1.5 metre and refilling the same complete as per direction of the Engineer-in-charge. (Payment will be made on the centre line measurements of total pipe line including all specials).				
1.4.1	15 mm dia.	6	Mtr.	42.00	252.00
1.4.2	20 mm dia.	6	Mtr.	42.00	252.00
1.4.3	25 mm dia.	12	Mtr.	42.00	504.00
1.4.4	32 mm dia.	3	Mtr.	42.00	126.00
1.4.5	40 mm dia.	3	Mtr.	47.00	141.00
1.4.6	50 mm dia.	6	Mtr.	60.00	360.00
1.4.7	65 mm dia.	3	Mtr.	71.00	213.00
1.4.8	75 mm dia. / 80 mm dia.	3	Mtr.	85.00	255.00
1.5	Supply & fixing of galvanised iron socket with I.S.I. mark				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.5.1	15 mm dia.	1	Each	15.00	15.00
1.5.2	20 mm dia.	1	Each	22.00	22.00
1.5.3	25 mm dia.	1	Each	32.00	32.00
1.5.4	32 mm dia.	1	Each	45.00	45.00
1.5.5	40 mm dia.	1	Each	60.00	60.00
1.5.6	50 mm dia.	1	Each	92.00	92.00
1.5.7	65 mm dia.	1	Each	161.00	161.00
1.5.8	80 mm dia.	1	Each	226.00	226.00
1.6	Supply & fixing of galvanised iron Jamnut				
1.6.1	15 mm dia.	1	Each	10.00	10.00
1.6.2	20 mm dia.	1	Each	12.00	12.00
1.6.3	25 mm dia.	1	Each	20.00	20.00
1.6.4	32 mm dia.	1	Each	32.00	32.00
1.6.5	40 mm dia.	1	Each	35.00	35.00
1.6.6	50 mm dia.	1	Each	60.00	60.00
1.6.7	65 mm dia.	1	Each	84.00	84.00
1.6.8	80 mm dia.	1	Each	130.00	130.00
1.7	Supply & fixing of GI plug				
1.7.1	15 mm dia.	1	Each	10.00	10.00
1.7.2	20 mm dia.	1	Each	19.00	19.00
1.7.3	25 mm dia.	1	Each	27.00	27.00
1.7.4	32 mm dia.	1	Each	43.00	43.00
1.7.5	40 mm dia.	1	Each	55.00	55.00
1.7.6	50 mm dia.	1	Each	86.00	86.00
1.7.7	65 mm dia.	1	Each	107.00	107.00
1.7.8	80 mm dia.	1	Each	158.00	158.00
1.8	Supply and fixing of G.I. reducing socket with ISI mark.				
1.8.1	20 mm dia.	1	Each	24.00	24.00
1.8.2	25 mm dia.	1	Each	34.00	34.00
1.8.3	32 mm dia.	1	Each	50.00	50.00
1.8.4	40 mm dia.	1	Each	66.00	66.00
1.8.5	50 mm dia.	1	Each	101.00	101.00
1.8.6	65 mm dia.	1	Each	177.00	177.00
1.8.7	80 mm dia.	1	Each	248.00	248.00
1.9	Supply and fixing of G.I. bend.				
1.9.1	15 mm dia.	1	Each	34.00	34.00
1.9.2	20 mm dia.	1	Each	52.00	52.00
1.9.3	25 mm dia.	1	Each	83.00	83.00
1.9.4	32 mm dia.	1	Each	154.00	154.00
1.9.5	40 mm dia.	1	Each	214.00	214.00
1.9.6	50 mm dia.	1	Each	360.00	360.00
1.9.7	65 mm dia.	1	Each	835.00	835.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.9.8	80 mm dia.	1	Each	1,463.00	1,463.00
1.10	Supply of G.I. plain equal elbow of approved brand and make				
1.10.1	15 mm dia.	1	Each	16.00	16.00
1.10.2	20 mm dia.	1	Each	26.00	26.00
1.10.3	25 mm dia.	1	Each	44.00	44.00
1.10.4	32 mm dia.	1	Each	66.00	66.00
1.10.5	40 mm dia.	1	Each	89.00	89.00
1.10.6	50 mm dia.	1	Each	139.00	139.00
1.10.7	65 mm dia.	1	Each	236.00	236.00
1.10.8	80 mm dia.	1	Each	365.00	365.00
1.11	Supply and fixing of G.I. plain tee of approved brand and make.				
1.11.1	15 mm dia.	1	Each	25.00	25.00
1.11.2	20 mm dia.	1	Each	41.00	41.00
1.11.3	25 mm dia.	1	Each	61.00	61.00
1.11.4	32 mm dia.	1	Each	87.00	87.00
1.11.5	40 mm dia.	1	Each	119.00	119.00
1.11.6	50 mm dia.	1	Each	189.00	189.00
1.11.7	65 mm dia.	1	Each	302.00	302.00
1.11.8	80 mm dia.	1	Each	420.00	420.00
1.12	Supply and fixing of G.I. reducing tee of approved brand and make.				
1.12.1	20 mm x 15 mm	1	Each	45.00	45.00
1.12.2	25 mm x 15 mm / 20 mm	1	Each	67.00	67.00
1.12.3	32 mm x 15 mm / 20 mm / 25 mm	1	Each	96.00	96.00
1.12.4	40 mm x 15 mm / 20 mm / 25 mm / 32 mm	1	Each	131.00	131.00
1.12.5	50 mm x 15 mm / 20 mm / 25 mm / 32 mm / 40 mm	1	Each	208.00	208.00
1.12.6	65 mm x 50 mm	1	Each	332.00	332.00
1.12.7	80 mm x 50 mm	1	Each	461.00	461.00
1.13	Supply and fixing long screw (150mm long) of TATA make with sockets (TATA make) and jamnut.				
1.13.1	15 mm dia.	1	Each	32.00	32.00
1.13.2	20 mm dia.	1	Each	45.00	45.00
1.13.3	25 mm dia.	1	Each	59.00	59.00
1.13.4	32 mm dia.	1	Each	74.00	74.00
1.13.5	40 mm dia.	1	Each	98.00	98.00
1.13.6	50 mm dia.	1	Each	140.00	140.00
1.13.7	65 mm dia.	1	Each	284.00	284.00
1.13.8	80 mm dia.	1	Each	318.00	318.00
1.14	Supply and fixing G.I. union.				
1.14.1	15 mm dia.	1	Each	45.00	45.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.14.2	20 mm dia.	1	Each	69.00	69.00
1.14.3	25 mm dia.	1	Each	96.00	96.00
1.14.4	32 mm dia.	1	Each	140.00	140.00
1.14.5	40 mm dia.	1	Each	172.00	172.00
1.14.6	50 mm dia.	1	Each	263.00	263.00
1.14.7	65 mm dia.	1	Each	516.00	516.00
1.14.8	80 mm dia.	1	Each	728.00	728.00
1.15	Supply and fixing of G.I. short piece of TATA make (Above 50 mm & upto 150 mm)				
1.15.1	15 mm dia.	1	Each	46.00	46.00
1.15.2	20 mm dia.	1	Each	60.00	60.00
1.15.3	25 mm dia.	1	Each	73.00	73.00
1.15.4	32 mm dia.	1	Each	76.00	76.00
1.15.5	40 mm dia.	1	Each	102.00	102.00
1.15.6	50 mm dia.	1	Each	126.00	126.00
1.15.7	65 mm dia.	1	Each	175.00	175.00
1.15.8	80 mm dia.	1	Each	213.00	213.00
1.16	Supply and fixing of G.I. reducing elbow of approved brand and make.				
1.16.1	20 mm x 15 mm	1	Each	28.00	28.00
1.16.2	25 mm x 15 mm / 20 mm	1	Each	48.00	48.00
1.16.3	32 mm x 15 mm / 20 mm / 25 mm	1	Each	74.00	74.00
1.16.4	40 mm x 15 mm / 20 mm / 25 mm / 32 mm	1	Each	99.00	99.00
1.16.5	50 mm x 15 mm / 20 mm / 25 mm / 32 mm / 40 mm	1	Each	153.00	153.00
1.16.6	65 mm x 50 mm	1	Each	260.00	260.00
1.16.7	80 mm x 50 mm	1	Each	400.00	400.00
1.17	Labour for fitting and fixing GI specials including cost of jointing materials. Plug, Socket, Reducing socket, Bend, Plain equal elbow, Reducing elbow, Nipple, Short piece, Plain tee, Reducing tee, jam nut, union, long screw, cross etc.				
1.17.1	(i) Upto 25 mm dia	1	Each	7.00	7.00
1.17.2	(ii) Above 25 mm upto 50 mm dia	1	Each	10.00	10.00
1.17.3	(iii) Above 50 mm upto 80 mm dia	1	Each	11.00	11.00
1.18	Labour for dismantling/ refixing G.I. pipe with fittings.				
1.18.1	Upto 32mm dia.	1	Mtr.	6.00	6.00
1.18.2	Above 32mm & upto 65mm dia.	1	Mtr.	8.00	8.00
1.18.3	Above 65mm & upto 100mm dia.	1	Mtr.	11.00	11.00
1.19	Supplying , fitting and fixing Gun metal check valve tested to 21 Kg per Sq. cm.				
1.19.1	Vertical check valve - 50 mm dia.	1	Each	1447.00	1,447.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.19.2	Horizontal check valve - 50 mm dia.	1	Each	2203.00	2,203.00
1.20	Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq.cm (for water lines only) ISI standered.				
1.20.1	80 mm	0	Each	5591.00	0.00
1.20.2	65 mm	0	Each	3929.00	0.00
1.20.3	50 mm	1	Each	2277.00	2,277.00
1.20.4	40 mm	1	Each	1590.00	1,590.00
1.20.5	32 mm	1	Each	1160.00	1,160.00
1.20.6	25 mm	2	Each	778.00	1,556.00
1.20.7	20 mm	2	Each	604.00	1,208.00
1.21	Opening out leaky water supply pipe and making the joints water tight including cutting threads where necessary.				
1.21.1	Upto 40mm dia.	5	Each	59.00	295.00
1.21.2	50mm dia.	5	Each	69.00	345.00
1.21.3	65mm to 100mm dia.	5	Each	113.00	565.00
1.22	Dismantling and refixing bib cock or stop cock				
1.22.1	15 mm	25	Each	12.00	300.00
1.22.2	20 mm	25	Each	16.00	400.00
1.23	Rewashing stopcock / bibcock / pushcock / pillar cock including gland packing if necessary.				
1.23.1	15mm	20	Each	13.00	260.00
1.23.2	25mm	10	Each	17.00	170.00
1.24	Renewing brass spindle and valve of stopcock / bibcock / pushcock / pillarcock - 15 mm	5	Each	74.00	370.00
1.25	Supply of PVC pipes of approved make (medium duty/ schedule-80) conforming to ASTM-D-1785 and threaded to match with GI pipes as per IS: 1239 (Part-I).				
1.25.1	15 mm dia.	6	Mtr.	61.00	366.00
1.25.2	20 mm dia.	6	Mtr.	83.00	498.00
1.25.3	25 mm dia.	12	Mtr.	121.00	1,452.00
1.25.4	32 mm dia.	6	Mtr.	169.00	1,014.00
1.25.5	40 mm dia.	6	Mtr.	207.00	1,242.00
1.25.6	50 mm dia.	6	Mtr.	282.00	1,692.00
1.25.7	65 mm dia.	1	Mtr.	456.00	456.00
1.25.8	80 mm dia.	1	Mtr.	578.00	578.00
1.26	Supply and fixing of PVC socket.				
1.26.1	15 mm dia.	5	Each	10.00	50.00
1.26.2	20 mm dia.	5	Each	14.00	70.00
1.26.3	25 mm dia.	5	Each	23.00	115.00
1.26.4	32 mm dia.	1	Each	33.00	33.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.26.5	40 mm dia.	1	Each	42.00	42.00
1.26.6	50 mm dia.	2	Each	53.00	106.00
1.26.7	65 mm dia.	1	Each	111.00	111.00
1.26.8	80 mm dia.	1	Each	180.00	180.00
1.27	Supply and fixing of PVC elbow.				
1.27.1	15 mm dia.	5	Each	13.00	65.00
1.27.2	20 mm dia.	5	Each	18.00	90.00
1.27.3	25 mm dia.	5	Each	27.00	135.00
1.27.4	32 mm dia.	1	Each	41.00	41.00
1.27.5	40 mm dia.	1	Each	69.00	69.00
1.27.6	50 mm dia.	2	Each	113.00	226.00
1.27.7	65 mm dia.	1	Each	165.00	165.00
1.27.8	80 mm dia.	1	Each	266.00	266.00
1.28	Supply and fixing of PVC Tee.				
1.28.1	15 mm dia.	5	Each	14.00	70.00
1.28.2	20 mm dia.	5	Each	23.00	115.00
1.28.3	25 mm dia.	5	Each	36.00	180.00
1.28.4	32 mm dia.	1	Each	56.00	56.00
1.28.5	40 mm dia.	1	Each	99.00	99.00
1.28.6	50 mm dia.	2	Each	125.00	250.00
1.28.7	65 mm dia.	1	Each	241.00	241.00
1.28.8	80 mm dia.	1	Each	349.00	349.00
1.29	Supply and fixing of PVC threaded Adopter (FT/MT).				
1.29.1	15 mm dia.	5	Each	11.00	55.00
1.29.2	20 mm dia.	5	Each	15.00	75.00
1.29.3	25 mm dia.	5	Each	19.00	95.00
1.29.4	32 mm dia.	1	Each	38.00	38.00
1.29.5	40 mm dia.	1	Each	68.00	68.00
1.29.6	50 mm dia.	2	Each	94.00	188.00
1.29.7	65 mm dia.	1	Each	113.00	113.00
1.29.8	80 mm dia.	1	Each	131.00	131.00
1.30	Supply and fixing of PVC Reducing Tee.				
1.30.1	20 mm x 15 mm	2	Each	37.00	74.00
1.30.2	25 mm x 15 mm	2	Each	43.00	86.00
1.30.3	25 mm x 20 mm	2	Each	47.00	94.00
1.30.4	40 mm x 15 mm	1	Each	101.00	101.00
1.30.5	40 mm x 20 mm	1	Each	102.00	102.00
1.30.6	40 mm x 25 mm	1	Each	74.00	74.00
1.30.7	40 mm x 32 mm	1	Each	153.00	153.00
1.30.8	50 mm x 25 mm	1	Each	210.00	210.00
1.30.9	50 mm x 32 mm	1	Each	181.00	181.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.30.10	65 mm x 40 mm	1	Each	302.00	302.00
1.30.11	65 mm x 50 mm	1	Each	295.00	295.00
1.30.12	80 mm x 25 mm	1	Each	468.00	468.00
1.31	Supply and fixing of PVC Reducing socket.				
1.31.1	20 mm x 15 mm	2	Each	15.00	30.00
1.31.2	25 mm x 15 mm	2	Each	26.00	52.00
1.31.3	25 mm x 20 mm	2	Each	23.00	46.00
1.31.4	32 mm x 25 mm	2	Each	30.00	60.00
1.31.5	40 mm x 25 mm	1	Each	71.00	71.00
1.31.6	40 mm x 32 mm	1	Each	43.00	43.00
1.31.7	50 mm x 25 mm	1	Each	137.00	137.00
1.31.8	50 mm x 40 mm	1	Each	66.00	66.00
1.31.9	65 mm x 40 mm	1	Each	114.00	114.00
1.31.10	65 mm x 50 mm	1	Each	117.00	117.00
1.31.11	80 mm x 40 mm	1	Each	136.00	136.00
1.31.12	80 mm x 50 mm	1	Each	141.00	141.00
1.31.13	80 mm x 65 mm	1	Each	151.00	151.00
1.32	Supply and fixing of PVC Threaded end cap.				
1.32.1	15 mm dia.	1	Each	10.00	10.00
1.32.2	20 mm dia.	1	Each	14.00	14.00
1.32.3	25 mm dia.	1	Each	18.00	18.00
1.32.4	32 mm dia.	1	Each	23.00	23.00
1.32.5	40 mm dia.	1	Each	34.00	34.00
1.32.6	50 mm dia.	1	Each	46.00	46.00
1.32.7	65 mm dia.	1	Each	70.00	70.00
1.32.8	80 mm dia.	1	Each	85.00	85.00
1.33	Supply and fixing of PVC Union.				
1.33.1	15 mm dia.	1	Each	28.00	28.00
1.33.2	20 mm dia.	1	Each	41.00	41.00
1.33.3	25 mm dia.	1	Each	56.00	56.00
1.33.4	32 mm dia.	1	Each	85.00	85.00
1.33.5	40 mm dia.	1	Each	122.00	122.00
1.33.6	50 mm dia.	1	Each	150.00	150.00
1.34	Supply and fixing of PVC Flange.				
1.34.1	50 mm dia.	1	Pair	160.00	160.00
1.34.2	65 mm dia.	1	Pair	253.00	253.00
1.34.3	80 mm dia.	1	Pair	310.00	310.00
1.35	Supply and fixing of PVC Reducing Elbow.				
1.35.1	25 mm x 15 mm	1	Each	67.00	67.00
1.35.2	25 mm x 20 mm	1	Each	63.00	63.00
1.35.3	80 mm x 50 mm	1	Each	235.00	235.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.36	Renewing C.I. clamp for pipe including cutting hole in wall etc				
1.36.1	25 mm	10	Each	32.00	320.00
1.36.2	32 mm	10	Each	45.00	450.00
1.36.3	40 mm	1	Each	46.00	46.00
1.36.4	50 mm	1	Each	58.00	58.00
1.36.5	80 mm	1	Each	127.00	127.00
1.37	Supplying & fixing P.V.C. clip.				
1.37.1	20 mm	10	Each	4.00	40.00
1.37.2	25 mm	10	Each	5.00	50.00
1.37.3	32 mm	5	Each	8.00	40.00
1.37.4	40 mm	5	Each	14.00	70.00
1.37.5	50 mm	5	Each	20.00	100.00
1.38	Removing chokage in G.I. pipe including cleaning pipe.				
1.38.1	Upto 25mm dia.	10	Mtr.	7.00	70.00
1.38.2	Above 25mm & upto 50mm dia.	10	Mtr.	9.00	90.00
1.38.3	Above 50mm & upto 100mm dia.	10	Mtr.	10.00	100.00
1.39	Supplying, fitting and fixing of CPVC Ball Valve conforming to IS-15778 : 2007 of approved make / brand.				
1.39.1	15 mm dia.	1	Each	99.00	99.00
1.39.2	20 mm dia.	2	Each	152.00	304.00
1.39.3	25 mm dia.	2	Each	239.00	478.00
1.39.4	32 mm dia.	1	Each	399.00	399.00
1.39.5	40 mm dia.	1	Each	553.00	553.00
1.39.6	50 mm dia.	1	Each	1,128.00	1,128.00
1.40	Supplying & fixing UPVC Male adaptor brass threaded.				
1.40.1	15 mm dia.	2	Each	105.00	210.00
1.40.2	20 mm dia.	2	Each	139.00	278.00
1.40.3	25 mm dia.	2	Each	220.00	440.00
1.40.4	32 mm dia.	1	Each	321.00	321.00
1.40.5	40 mm dia.	1	Each	348.00	348.00
1.40.6	50 mm dia.	1	Each	598.00	598.00
1.41	Supplying & fixing UPVC Female adaptor brass threaded.				
1.41.1	15 mm dia.	2	Each	75.00	150.00
1.41.2	20 mm dia.	2	Each	103.00	206.00
1.41.3	25 mm dia.	2	Each	192.00	384.00
1.41.4	32 mm dia.	1	Each	273.00	273.00
1.41.5	40 mm dia.	1	Each	406.00	406.00
1.41.6	50 mm dia.	1	Each	576.00	576.00
2.0	Cisterns, P.V.C. tanks etc :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
2.1	Supplying, fitting and fixing 10 lit porcelain low down cistern of approved make with either side or bottom inlet, side overflow, brackets complete with all internal PVC fittings.	1	Each	2,297.00	2,297.00
2.2	Supplying, fitting and fixing 10 ltr. PVC low down cistern conforming to IS specification with PVC fittings complete, C.I. brackets including two coats of painting to bracket etc.	1	Each	1,015.00	1,015.00
2.3	Supplying, fitting and fixing of low down cistern parts of approved make.				
2.3.1	Internal fitting for cistern complete.	1	Each Set	284.00	284.00
2.3.2	Outlet Assembly	1	Each	279.00	279.00
2.3.3	Inlet assembly	5	Each	64.00	320.00
2.3.4	Knob	2	Each	304.00	608.00
2.4	Renewing high pressure polythene ball cock of approved quality with polythene ball and aluminium lever complete for pipe of dia.				
2.4.1	i) 15mm	2	Each	71.00	142.00
2.4.2	ii) 20mm	2	Each	86.00	172.00
2.4.3	ii) 25mm	2	Each	120.00	240.00
2.5	Dismantling ball cock and re-fixing same after repairs including straightening lever and renewing split pin.				
2.5.1	15 mm dia.	5	Each	28.00	140.00
2.5.2	20 mm dia.	5	Each	33.00	165.00
2.5.3	25 mm dia.	5	Each	36.00	180.00
2.6	Changing the lather only of syphon of automatic cistern including taking out and refixing necessary parts.	10	Each	39.00	390.00
2.7	Supply, fitting and fixing PVC water storage tank of approved quality with closed top with lid. (Black) Multi layer.				
2.7.1	a) 500 Ltr. Capacity	1	Each	2,584.00	2,584.00
2.7.2	b) 1000 Ltr. Capacity.	1	Each	5,128.00	5,128.00
2.7.3	c) 2000 Ltr. Capacity	0	Each	10,434.00	0.00
2.8	Cleaning and removing mud upto 2000 litre Water Tank including masonry reservior.	10	Each	110.00	1,100.00
2.9	Cleaning and removing mud above 2000 litre Water Tank including masonry reservior.	100	Cum	67.00	6,700.00
3.0	Wash Basins, Sinks etc and Fittings :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.1	Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75mm x 75mm x 75mm. Wooden blocks C.P. waste fittings of 32mm dia, one approved quality brass C.P. pillar cock of 15mm dia, C.P. china with rubber plug of 30mm dia., approved quality PVC waste pipe with C.P. nut 32mm dia, 900mm long approved quality PVC connection pipe with heavy brass C.P. nut 300mm long including mending good all damages and painting the brackets with two coats of approved paints.				
3.1.1	550mm x 400mm size.	1	Each	2,208.00	2,208.00
3.1.2	630mm x 450 mm size.	1	Each	3,260.00	3,260.00
3.2	Supplying, fitting and fixing pedestal of approved make for wash basin.	1	Each	1,497.00	1,497.00
3.3	White vitreous china sink supplied, fitted and fixed in position on C.I. brackets including two coats of painting of brackets. A) Plain edge sink with overflow. (i) 610 mm x 450 mm x 250 mm	0	Each	5,445.00	0.00
3.4	Supplying, fitting & fixing stainless steel (SS 304 grade) sink complete with waste fittings and two coats of painting C.I. brackets.				
3.4.1	Sink only, 630 mm x 550 mm x 180 mm.	1	Each	3,788.00	3,788.00
3.4.2	Sink with drain board 1050 mm x 450 mm x 180 mm	0	Each	5,006.00	0.00
3.5	Supplying, fitting and fixing complete Bottle waste trap (Heavy Quality)				
3.5.1	Chromium plated Bottle trap 32 mm with 190 mm long connecting pipe and wall flange (Equivalent to Code No. 545 & Model - Tropical / Sumthing Special of ESSCO or similar brand).	1	Each	629.00	629.00
3.5.2	PTMT Bottle trap 32 mm with connecting pipe (Prayag or equivalent).	1	Each	443.00	443.00
3.6	Supplying, fitting & fixing approved brand PVC connector white flexible with both end coupling with heavy brass over C.P. nut 15mm. dia				
3.6.1	300 mm long.	2	Each	57.00	114.00
3.6.2	450 mm long.	2	Each	82.00	164.00
3.6.3	600 mm long.	5	Each	107.00	535.00
3.6.4	750 mm long.	2	Each	117.00	234.00
3.6.5	900 mm long.	2	Each	147.00	294.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.7	Supplying, fitting and fixing approved brand 32 mm dia. P.V.C. waste pipe, with PVC coupling at one end fitted with necessary clamps.				
3.7.1	600 mm long.	2	Each	47.00	94.00
3.7.2	750 mm long.	2	Each	59.00	118.00
3.7.3	900 mm long.	2	Each	75.00	150.00
3.8	Supplying, fitting and fixing Waste fittings complete.				
3.8.1	C.P. over brass- 32 mm each	2	Each	190.00	380.00
3.8.1	Polythene- 32 mm	5	Each	44.00	220.00
3.8.2	Supply, Fitting & Fixing of 32 mm PVC Waste Nozzle with jamnut, full thread or half thread complete for wash basin/ urinal.	5	Each	48.00	240.00
3.8.3	Flexible waste pipe of 32 mm dia. for wash basin / urinal outlet.	5	Mtr.	22.00	110.00
3.9	Supplying, fitting and fixing C.I. bracket including two coats of painting				
	a) Wash basin, Dental spitton	2	Each	135.00	270.00
	(b) Sink, Drain board	2	Each	149.00	298.00
	(c) Cistern	2	Each	94.00	188.00
3.10	Supplying, fitting and fixing pillar cock, bib cock & stop cock of approved make.				
3.10.1	CP Pillar Cock Super Deluxe with Aerator - 15 mm. (Equivalent to Code No. 508 & Model No. Tropical / Sumthing Special of ESSCO or similar brand).	2	Each	592.00	1,184.00
3.10.2	PTMT Pillar cock (Prayag or equivalent)- 15 mm	2	Each	222.00	444.00
3.10.3	Chromium plated Bib Cock short body (Equivalent to Code No. 511 & Model - Tropical/ Sumthing Special of ESSCO or similar brand)	3	Each	539.00	1,617.00
3.10.4	Chromium plated Bib Cock long body with wall flange with aerator (Equivalent to Code No. 512 & Model - Tropical/ Sumthing Special of ESSCO or similar brand)	1	Each	659.00	659.00
3.10.5	Chromium plated Bib Cock (angular shape with wall flange) (Equivalent to Code No. 5037/ 5047 & Model - Florentine of Jaquar or similar brand)	1	Each	861.00	861.00
3.10.6	Chromium plated angular Stop Cock with wall flange (Equivalent to Code No. 5053 & Model - Florentine of Jaquar or similar brand).	1	Each	815.00	815.00
3.10.7	Chromium plated concealed Stop Cock heavy duty (Equivalent to Code No. 5083 & Model - Florentine of Jaquar or similar brand).	1	Each	953.00	953.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.10.8	PTMT(Polytetra) Bib Cock / Stop Cock (Prayag or equivalent)- 15mm.	2	Each	154.00	308.00
3.10.9	Supplying, fitting and fixing alloy iron with brass spindle bib cock/ stop cock of approved brand and make, spray painted and tested to 21 kg per sq.cm. - 15 mm.	1	Each	169.00	169.00
3.10.10	Chromium plated round shower with revolving joint 100 mm dia with rubid cleaning system (Equivalent to Code No. 542(N) & Model - Tropical / Sumthing Special of ESSCO or similar brand)	1	Each	452.00	452.00
3.10.11	Hand Shower (Health Faucet) with 1mtr Flexible Tube with Wall Hook(Equivalent to Code No.573 & Model -ALLIED of Jaquar or similar)	1	Each	1,251.00	1,251.00
3.10.12	CP 2-way bib Cock - 15 mm, supplied, fitted and fixed. (Code No.5041 & Model - FLORENTINE of JAQUAR or similar brand).	1	Each	1,269.00	1,269.00
3.10.13	Supplying, fitting and fixing 15 mm swan neck tap with left & right hand operating nob with aerator (Equivalent to Code No. 510, 510(A) and Model - TROPICAL / SUMTHING SPECIAL of ESSCO or similar brand)	1	Each	811.00	811.00
3.11	Supplying, fitting and fixing C.P. Extension pipe	2	Each	106.00	212.00
3.12	Supplying, fitting and fixing C.P. wall flange	5	Each	64.00	320.00
3.13	Re-fixing washbasin with or without waste fittings with brackets.	5	Each	70.00	350.00
3.14	Dismantling was basin with or without waste fittng with brackets.	2	Each	35.00	70.00
3.15	Re-fixing sink with or without waste fittings with brackets. Upto 750 mm length	2	Each	76.00	152.00
3.16	Dismantling sink with or without waste fittings with brackets.				
3.16.1	Upto 450 mm length	5	Each	40.00	200.00
3.16.2	450 mm and upto 600 mm lengt	5	Each	52.00	260.00
3.16.3	bove 600 mm and upto 750 mm length	5	Each	59.00	295.00
3.17	Cleaning wash basin/ sink with acid.	10	Each	16.00	160.00
3.18	Dismatling of pillar cock of wash basin	20	Each	9.00	180.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.18.1	Refixing of pillar cock of wash basin	20	Each	9.00	180.00
3.19	Supplying, fitting and fixing bevelled edged mirror 5.5 mm thick silver red as per I.S. 3438 / 1965 together with brass C.P. hinges. 600 mm X 450 mm	2	Each	484.00	968.00
3.20	Supplying, fitting and fixing liquid soap container.				
3.20.1	Cromium plated.	2	Each	393.00	786.00
3.20.2	PTMT (Prayag or equivalent as approved).	2	Each	210.00	420.00
3.21	Supply, fitting and fixing towel rail with two brackets C.P. over brass- 25 mm dia and 600 mm long.	2	Each	430.00	860.00
3.22	Supplying, fitting and fixing PTMT smart shelf of approved make of size 300 mm.	1	Each	223.00	223.00
4	Inspection Pit, Soak Pit etc :::				
4.1	Construction of circular soaks well 2.5 mtr. deep in all types of sandy soils with drey brickwork upto 1.6 mtr. from the bottom having 150mm intermediate cement brick work (1:4) band all round and cement brick work (1:4) upto 0.90 mtr. from top with 19mm thick cement plastering (4:1) to inside face upto the depth of cement brickwork, 15mm thick cement plaster (4:1) on outer face from top of the well upto G.L. and 6mm thick cement plaster (4:1) on top of the RCC cover slab including filling bottom 1.00 mtr. of inside of the well with brick metal (50mm to 63mm size) including RCC cover slab of 100mm thick with cement concrete (1:1.5:3) with stone chips with necessary reinforcement and shuttering including one 560mm dia RCC manhole cover (heavy type) of approved make supplied, fitted and fixed in the cover slab with necessary fittings making necessary, arrangements for pipe connection, excavation of well including shoring, dewatering and removing the excess earth from the premises as per direction complete in all respect with all costs of labour and materials.				
	With 250mm thick dry brick work and 250mm thick cement brick work (6:1) and 1.00m inside dia. (SAIL/TATA/RINL)	0	Each	16,577.00	0.00
4.2	Removing sludge from septic tank, soak well etc. by methor labour including disposal of the same outside the compound as directed. Upto 200 users. Beyond a lead of 150 metre and outside the Municipal limit	0	Each	5,695.00	0.00
4.3	Cleaning silt of inspection pit.	5	Each	154.00	770.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
4.3.1	Cleaning silt of master trap pit.	1	Each	1,152.00	1,152.00
4.4	Supplying, fitting and fixing in position RCC manhole / pit cover of approved make with rim (Heavy Type).				
4.4.1	450mm dia.	1	Each	276.00	276.00
4.4.2	560mm dia.	1	Each	338.00	338.00
4.5	Supplying, fitting and fixing in position C.I manhole / pit cover with rim.				
4.5.1	Round 450mm x 100mm x 25Kg.	1	Each	2,035.00	2,035.00
4.5.2	Round 450mm x 100mm x 50Kg.	0	Each	3,526.00	0.00
4.6	Supplying, fitting and fixing in position reinforced cement polymer concrete manhole/ gully pit cover with matching frame as per IS: 12592(M.D)				
4.6.1	Lighty duty gully pit cover (yard gully) with frame and hinge arrangement for opening of size, cover: 300mm x 275mm x 30 mm, Frame: 450mm x 375mm x 75 mm, Opening: 300mm x 225 mm, Weight: 43kg (approx).	1	Each	1,233.00	1,233.00
4.6.2	15 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 460 mm x 75 mm, Frame: 620 mm x 150 mm, Opening: 360mm, Weight: 100 kg (approx).	0	Each	2,536.00	0.00
4.6.3	5 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 565 mm x 65 mm, Frame: 665 mm x 125 mm, Opening: 470mm, Weight: 90 kg (approx).	0	Each	2,582.00	0.00
4.6.4	3 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 450mm x 50mm, Frame: 540mm x 100mm, Opening: 370mm, Weight: 46kg (approx).	1	Each	1,319.00	1,319.00
5	Soil Pipe and Fittings :::				
5.0	Supplying, fitting and fixing UPVC pipes (B-Type) & fittings conforming to IS:13592-1992 for above ground work including cost of jointing materials, all necessary specials, cutting pipes, cutting holes in wall or RCC floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost and fitting and fixing holder bat clamps (any floor) or for underground work including cutting trenches upto 1.5 metre and refilling the same complete as per direction of the Engineer-in-charge. (Payment will be made on centre line measurement of the total pipeline including specials.)				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.1	Single socketed 3.0 metre length UPVC pipes - Above ground				
5.1.1	75 mm dia.	3	Mtr.	241.00	723.00
5.1.2	110 mm dia.	3	Mtr.	349.00	1,047.00
5.1.3	160 mm dia.	1	Mtr.	612.00	612.00
5.2	Single socketed 3.0 metre length UPVC pipes - Under ground				
5.2.1	75 mm dia.	3	Mtr.	269.00	807.00
5.2.2	110 mm dia.	3	Mtr.	376.00	1,128.00
5.2.3	160 mm dia.	1	Mtr.	639.00	639.00
5.3	Coupler				
5.3.1	75 mm dia.	2	Each	46.00	92.00
5.3.2	110 mm dia.	1	Each	85.00	85.00
5.3.3	160 mm dia.	1	Each	261.00	261.00
5.4	Plain Tee				
5.4.1	75 mm dia.	2	Each	46.00	92.00
5.4.2	110 mm dia.	2	Each	85.00	170.00
5.4.3	160 mm dia.	1	Each	262.00	262.00
5.5	Door Tee				
5.5.1	75 mm dia.	2	Each	101.00	202.00
5.5.2	110 mm dia.	2	Each	195.00	390.00
5.5.3	160 mm dia.	1	Each	514.00	514.00
5.6	Bend 45 ⁰				
5.6.1	75 mm dia.	2	Each	54.00	108.00
5.6.2	110 mm dia.	2	Each	89.00	178.00
5.6.3	160 mm dia.	1	Each	293.00	293.00
5.7	Bend 87.5 ⁰				
5.7.1	75 mm dia.	2	Each	61.00	122.00
5.7.2	110 mm dia.	2	Each	120.00	240.00
5.7.3	160 mm dia.	1	Each	338.00	338.00
5.8	Door Bend (T.S)				
5.8.1	75 mm dia.	2	Each	83.00	166.00
5.8.2	110 mm dia.	2	Each	147.00	294.00
5.8.3	160 mm dia.	1	Each	369.00	369.00
5.9	Plain Y				
5.9.1	75 mm dia.	1	Each	102.00	102.00
5.9.2	110 mm dia.	1	Each	206.00	206.00
5.9.3	160 mm dia.	1	Each	583.00	583.00
5.11	Vent Cowl				
5.11.1	75 mm dia.	1	Each	25.00	25.00
5.11.2	110 mm dia.	1	Each	33.00	33.00
5.11.3	160 mm dia.	1	Each	57.00	57.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.10	Pipe Clip				
5.10.1	75 mm dia.	5	Each	16.00	80.00
5.10.2	110 mm dia.	5	Each	21.00	105.00
5.10.3	160 mm dia.	2	Each	43.00	86.00
5.12	Nahani Trap	2	Each	105.00	210.00
5.13	Plain floor trap with Top tile & Strainer - 75 mm	1	Each	144.00	144.00
5.14	Supplying, fitting and fixing with cement jointing (1:3) salt glazed stoneware pipe including excavation of earth upto 1.50mm depth in all sorts of soil both mixed or unmixed and refilling (but excluding concreting at bottom and sides).				
5.14.1	150 mm.	1	Mtr.	334.00	334.00
5.14.2	300 mm.	1	Mtr.	927.00	927.00
5.15	Renewing cast iron inspection door with bolts and nuts complete for fittings of 50mm dia to 150mm dia HCI pipe.	2	Each	86.00	172.00
5.16	Supply, fitting and fixing C.I. round grating.				
5.16.1	100 mm dia.	2	Each	62.00	124.00
5.16.2	150 mm dia.	2	Each	85.00	170.00
5.17	Supply, fitting and fixing C.I. square jalli.				
5.17.1	100 mm.	2	Each	73.00	146.00
5.17.2	150 mm.	2	Each	102.00	204.00
5.17.3	225 mm.	2	Each	142.00	284.00
5.18	Supplying and fixing aluminium domical grating 125mm.	2	Each	56.00	112.00
5.19	Cleaning and removing silt from chocked up gully pit.	5	Each	33.00	165.00
5.20	Removing chokage of H.C.I. or S.W. pipe or R.C.C. Hume pipe with split bamboo etc.				
5.20.1	a) Underground	50	Mtr.	11.00	550.00
5.20.2	b) Over ground	50	Mtr.	9.00	450.00
6.0	Water Closets and Urinals :::				
6.1	Supplying, fitting and fixing EWC in white glazed vitreous chinaware of approved make in position complete with necessary boolts, nuts, etc. With 'S' trap	1	Each	1,512.00	1,512.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.2	Supplying, fitting and fixing Anglo-Indian W.C. in white glazed vitreous chinaware of approved make in position complete with necessary boolts, nuts, etc. With 'S' trap (with vent)	1	Each	3,287.00	3,287.00
6.3	Supplying, fitting and fixing Orissa pattern water closet in white glazed vitreous chinaware of approved make in position complete excluding 'P' or 'S' trap (excluding cost of concrete for fixing). (i) 580 mm X 440 mm.	1	Each	1,613.00	1,613.00
6.4	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete.				
	(i) 635 mm X 395 mm X 420 mm	1	Each	2,869.00	2,869.00
	(i) 470 mm X 280 mm X 340 mm	1	Each	945.00	945.00
6.5	Supplying, fitting and fixing 32 mm dia. flush pipe of approved make with necessary fixing materials and clamps complete.				0.00
6.5.1	a) Polythene flush pipe	3	Each	155.00	465.00
6.6	Supplying, fitting and fixing 18mm thick marble partition slab with white chawk doongri marbel square cut, both sides polished with two front cover rounded and edges polished.	1	Sqm.	1,426.00	1,426.00
6.7	Supplying, fitting and fixing porcelain partition wall of approved make of size 618 mm x 310 mm complete in all respect	1	Each	1,132.00	1,132.00
6.8	Supplying, fitting and fixing Closet seat of approved make with lid and CP hinges, rubber buffer and brass screws complete.				0.00
6.8.1	For E.W.C. - Plastic (hollow type) white	3	Each	380.00	1,140.00
6.8.2	For Anglo Indian - Plastic (hollow type) white	1	Each	485.00	485.00
6.9	Supplying, fitting and fixing porcelain toilet paper holder of approved makewith wooden spindle as necessary. Roll type size 250mm x 125mm.	1	Each	293.00	293.00
6.10	Supplying, fitting and fixing dome shaped C.P. waste grating for urinals. 32 mm.	1	Each	180.00	180.00
6.11	Dismantling and refixing marble or mosaic partition.	1	Each	100.00	100.00
6.11 A	Dismantling urinal.	2	Each	33.00	66.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.11 B	Refixing urinal	2	Each	35.00	70.00
6.12	Removing chokage of water closet, urinal and waste trap.	10	Each	26.00	260.00
6.13	Rectifying leakage of WC by new joints by methor mistry.	10	Each	39.00	390.00
6.14	Renewing 15mm C.P. over brass spreader.	1	Each	295.00	295.00
6.15	Re-fixing flush pipe/ MS bend/ CP flush pipe with I.R. adapter after removing chokages.	5	Each	35.00	175.00
7.0	Miscellaneous :::				
7.1	Repairing peets valve including renewing packing gland, acid wash etc.				
7.1.1	25mm to 40mm valve.	5	Each	38.00	190.00
7.1.2	40mm to 100mm valve.	5	Each	82.50	412.50
7.2	Dismantling and re-fixing of auto flush valve, cascade type cistern after cleaning with acid, changing washers adjusting the same etc. all complete.	5	Each	71.50	357.50
7.3	Supplying, fitting and fixing 15mm dia, 450mm long C.P. connector.	2	Each	165.00	330.00
7.4	Attention automatic cistern of urinal or PVC flushing cisterns of high / low level of adjustment upto 10 ltr, cleaning with acid etc.	10	Each	44.00	440.00
7.5	Dismantling & refixing of Bib cock, Pillar cock, Push cock, Angular, urinal spreader etc. after cleaning with acid, removing of chockage, renewing washer etc all complete.	20	Each	33.00	660.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
7.6	Cleaning rubbish, sludge, weeds scum, liquid earth, mud etc.from road side masonry drain/ hume pipe drain/ culvert etc. by mather labour after removing concrete. Slab/manhole cover etc. without damaging the same and refixing the same properly after cleaning as necessary and removing the sludge etc.etc.by using iron pans, buckets including all labour, tools & plants including removing the spoils in dry condition and disposing the same by truck beyond the road side in conformity with municipal/ corporation rules for such disposal including loading into truck and cleaning the road side in all respects as per direction of the Engineer-in-Charge. (Payment will be made on the basis of actual stack measurment of spoils in dry condition at roadside).	1	Cum.	289.00	289.00

Cost of plumbing and sanitary work (Staff Quarter) ::: 1,58,103.00

Summary

Name of work:Annual maintenance contract for Civil, Sanitary & Plumbing works at BITM, Kolkata & Staff quarters (Karmi Abas), Kasba, Kolkata for the year 2020-2021.	
Cost of Civil Works for BITM, Kolkata = Rs.	3,61,781.00
Cost of Civil Works for Staff Quarters, Kasba, Kolkata = Rs.	2,24,201.00
Cost of Plumbing & Sanitary Work for BITM, Kolkata = Rs.	2,38,388.00
Cost of Plumbing & Sanitary for Staff Quarters, Kasba, Kolkata = Rs.	1,58,103.00
Total Cost of Civil, Sanitary & Plumbing Works for BITM, Kolkata & Staff Quarters (Karmi Abas), Kasba, Kolkata = Rs.	9,82,473.00
Add GST@ 12% on Rs. 9,82,473.00	1,17,897.00
Cost of work excluding labour welfare cess Rs.	11,00,370.00
Add Labour Welfare Cess @ 1 % on Rs. 11,00,370.00	11,004.00
Estimated cost of the work Rs.	11,11,374.00

(Rupees Eleven lacs Eleven thousand Three hundred & Seventy Four Only)

Materials to be used among the following materials list which has to get approved by the BITM authority prior execution of work:-

- i) **Cement:** OPC 53 Grade of Ultratech/ ACC/ Lafarge/ Ambuja make
- ii) **Vitrified Tiles:** Kajaria/ Johnson & Johnson/ Marbonite/ Nitco
- iii) **Ceramic Tiles:** Kajaria/ Orient/ Somany/ Vermora
- iv) **Cement Based Paint:** Duracem (Berger)/ Snowcem
- v) **Oil Bound Paint, Plastic paint, Synthetic Enamel:** Berger/ Asian paints/ ICI.
- vi) **Weather Coat:** Asian paint Apex Ultima, Weather shield Max of Dulux (ICI)
- vii) **Wood :** Only seasoned and knot/ crack free Teak Wood, Sal wood etc to be used.
- viii) **Ply Wood:** Only new & latest stock of first grade Phenol bonded plywood of Green ply (Green)/ Century make conforming IS:303, BWR grade to be used.
- ix) **Decorative Laminate:** Greenlam/ Centurymica
- x) **Alu Board:** Eurobond/ Alex panels/ Alu Décor/ Alu bond
- xi) **Adhesive:** Only Fevicol/ Araldite should be used for frame jointing, ply fixing on frames, pasting works etc.
- xii) **Glass:** Saint Gobain/ Modi Guard/ Ashai make to be used.
- xiii) **Aluminium Section:** Hindalco, Indalco, Beco
- xiv) **Floor Spring :** Godrej/ Ozone/ Hardwin / Garnish/ DORMA
- xv) **Hydraulic Door Closer:** Godrej/ Ozone/ Hardwin/Garnish/ DORMA
- xvi) **Gypsum Board:** Gypsum India, Saint Gobain
- xvii) **Vitreous Chinaware fixture:** Hindustan, Parry ware, CERA, Hindware, Neycer
- xviii) **PVC Pipe:** Ori-plast, Supreme, Ashirvad, Astral
- xix) **PVC Water Tank:** Sintex, Patton
- xx) **PVC Cistern & Fittings:** Reliance Classic/ Hindware/ Parryware
- xxi) **UPVC Pipe for rain water down pipe:** Ori-plast, Supreme, Ashirvad, Astral
- xxii) **CP brass Bib cock, Stop Cock, Angular etc:** Jaquar, Essco, Marc
- xxiii) **GI Pipe fittings:** Tata/ Jindal
- xxiv) **Gate Valve:** Leader, HM, Lakshmi
- xxv) **Lock:** All locks should be Godrej make.
- xxvi) **Water Proofing Compound:** Sika, SWC, Pedilite, CICO
- xxvii) **Micro concrete:** Pidilite, CICO, Sika
- xxviii) **Inner Parts of bibcock, stopcock, pillarcock etc.:** Essco
- xxix) **CPVC Ball Valve :** Supreme, Ashirvad, Astral
- xxx) **Suncontrol film :** M/S Garware Polyester limited or equivalent of M/S 3M Window film.
- xxxi) **PVC Sanitary fixtures :** PRAYAG, Wtaertec