

Original Estimate

Carrying out minor maintenance civil works of Hall of Residence -2,5,12,13 & 14 at IIT Kanpur.

N/W

Estimate ID : Zonal_Hostel (Zone-6 Area)

SLNo	Description	Qty	Unit	Rate	Amount
1	Carriage of Materials				
1.1	By Mechanical Transport including loading,unloading and stacking				
1.1.1	Lime, moorum, building rubbish Lead - 5	3	cum	261.35	784.00
1.1.2	Earth Lead - 5	3	cum	326.68	980.00
	Sub-Total				1764.00
2	EARTH WORK				
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lif upto 1.5 m, as directed by Engineer-in-Charge:				
2.1.1	All kinds of soil	10	sqm	129.85	1299.00
2.2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
2.2.1	All kinds of soil.	100	cum	260.30	26030.00
2.3	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:				
2.3.1	All kinds of soil				
2.3.1.1	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	10	metre	352.15	3522.00
2.4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lif.	15	cum	196.00	2940.00
2.5	Excavating, supplying, stacking and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in foundation trenches, plinth, sides of foundation etc. complete for all lift.	3	cum	700.50	2102.00

2.6	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	1	cum	2123.75	2124.00
2.7	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.				
2.7.1	All kinds of soil	100	sqm	34.15	3415.00
2.8	Excavating holes more than 0.10 cum & upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil, as directed within a lead of 50 m and lift upto 1.5 m.				
2.8.1	All kinds of soil	10	each	82.45	825.00
2.9	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	100	sqm	17.60	1760.00
2.1	Supplying chemical emulsion in sealed containers including delivery as specified.				
2.10.1	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	20	litre	234.75	4695.00
2.11	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
2.11.1	Along external wall where the apron is not provided using chemical emulsion @75litres/ sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:				
2.11.1.1	With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration	50	metre	38.90	1945.00
2.11.2	Treatment of existing masonry using chemical emulsion @ one litre per hole at 300 mm interval including drilling holes at 45 degree and plugging them with cement mortar 1:2 (1 cement : 2 coarse sand) to the full depth of the hole :				
2.11.2.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration	20	metre	43.00	860.00
2.12	Extra for levelling & neatly dressing of disposed soil completely as directed by Engineer-in-charge.	15	cum	93.05	1396.00
	Sub-Total				52913.00
3	CEMENT CONCRETE (CAST IN SITU)				
3.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				

3.1.1	1:1.5:3 (1 Cement: 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	2	cum	8340.85	16682.00
3.1.2	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	2	cum	7878.50	15757.00
3.1.3	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	2	cum	7294.70	14589.00
3.1.4	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources: 8 graded stone aggregate 40 mm nominal size derived from natural sources)	2	cum	6812.00	13624.00
3.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:				
3.2.1	1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	1	cum	9895.20	9895.00
3.3	Centering and shuttering including strutting, propping etc. and removal of form work for:				
3.3.1	Foundations, footings, bases for columns	5	sqm	392.15	1961.00
3.4	Providing and fixing up to floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc., including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), cost of required Centering complete.				
3.4.1	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1	cum	10105.10	10105.00
3.5	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 12.5 mm nominal size derived from natural sources)	5	sqm	410.85	2054.00
3.6	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	5	per bag of 50kg cement used	18.15	91.00

3.7	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	5	sqm	146.15	731.00
3.8	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	15	sqm	749.30	11240.00
	Sub-Total				96729.00
4	REINFORCED CEMENT CONCRETE				
4.1	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
4.1.1	1:1.5:3(1 cement: 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	2	cum	9045.75	18092.00
4.1.2	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	1	cum	8583.40	8583.00
4.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:				
4.2.1	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1	cum	10852.95	10853.00
4.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15 degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	3	cum	11505.50	34517.00
4.4	Centering and shuttering including strutting, propping etc. and removal of form for				

4.4.1	Foundations, footings, bases of columns, etc. for mass concrete	10	sqm	392.15	3922.00
4.4.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	10	sqm	842.50	8425.00
4.4.3	Suspended floors, roofs, landings, balconies and access platform	10	sqm	927.25	9273.00
4.4.4	Shelves (Cast in situ)	10	sqm	927.25	9273.00
4.4.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	10	sqm	736.40	7364.00
4.4.6	Columns, Pillars, Piers, Abutments, Posts and Struts	10	sqm	961.30	9613.00
4.4.7	Edges of slabs and breaks in floors and walls				
4.4.7.1	Under 20 cm wide	15	metre	208.55	3128.00
4.5	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m clear span up to floor five level, including the cost of required centering, shuttering but , excluding the cost of reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	2	cum	14325.95	28652.00
4.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
4.6.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	100	kg	107.85	10785.00
4.7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
4.7.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	100	kg	107.85	10785.00
4.8	Providing and fixing sheet covering over expansion joints with iron screws as per design.				
4.8.1	Aluminium fluted strips 3.15 mm thick.				
4.8.1.1	150 mm wide	10	metre	567.60	5676.00
4.8.1.2	200 mm wide	10	metre	753.85	7539.00
4.9	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	10	metre	78.40	784.00
	Sub-Total				187264.00
5	MASONRY WORK				
5.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
5.1.1	Cement mortar 1:6(1 cement :6 coarse sand)	2	cum	7132.25	14265.00
5.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
5.2.1	Cement mortar 1:6(1 cement : 6 coarse sand)	2	cum	9105.95	18212.00

5.3	Brick work 7 cm thick with common burnt clay F.P.S. (non modular) brick of class designation 7.5 in cement mortar 1:3 (1 cement: 3 coarse sand) in superstructure above plinth level and upto floor five level.	2	sqm	865.65	1731.00
5.4	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :				
5.4.1	cement mortar 1:4(1 cement :4 coarse sand)	10	sqm	905.05	9051.00
5.5	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
5.5.1	Cement mortar 1:4(1 cement :4 coarse sand)	10	sqm	1123.80	11238.00
5.6	Brick work with common burnt clay selected F.P.S. (non modular) bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement: 6 coarse sand)				
5.6.1	From ground level upto plinth level	2	cum	7361.35	14723.00
5.6.2	Above plinth level upto floor V level	2	cum	9439.75	18880.00
5.7	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	50	metre	60.85	3043.00
	Sub-Total				91143.00
6	CLADDING WORK				
6.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.				
6.1.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble				
6.1.1.1	Area of slab upto 0.50 sqm	2	sqm	3414.80	6830.00
6.1.2	Granite stone slab of colour black, Cherry/Ruby red				
6.1.2.1	Area of slab upto 0.50 sqm	5	sqm	5413.50	27068.00
6.1.2.2	Area of slab over 0.50 sqm	5	sqm	5136.30	25682.00
6.1.3	Granite stone slab of all colour and texture except black, Cherry/Ruby red				
6.1.3.1	Area of slab over 0.50 sqm	1	sqm	3848.70	3849.00
6.2	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				

6.2.1	Marble work	10	metre	298.60	2986.00
6.2.2	Granite work	10	metre	510.95	5110.00
6.3	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	5	each	978.70	4894.00
6.4	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	10	sqm	506.70	5067.00
6.5	Providing and fixing cramps of required size & shape in RCC/ CC/ Brick masonry backing with cement mortar 1:2 (1 cement :2 coarse sand), including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately).				
6.5.1	Stainless steel cramps	1	kg	714.40	714.00
6.6	Providing and fixing expansion hold fasteners on C.C./R.C.C./Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete.				
6.6.1	Wedge expansion type				
6.6.1.1	Fastener with threaded dia 10 mm	3	each	40.00	120.00
6.6.1.2	Fastener with threaded dia 12 mm	3	each	61.70	185.00
6.7	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.				
6.7.1	White Agaria Marble Stone	5	sqm	3500.45	17502.00
6.7.2	Granite Stone of approved shade	5	sqm	4051.85	20259.00
6.8	Providing and fixing copper pins 7.5 cm long 6 mm diameter for securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases.	5	each	43.90	220.00
6.9	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3(1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	100	sqm	1267.95	126795.00

	Sub-Total				247281.00
7	WOOD AND P. V. C. WORK				
7.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
7.1.1	Second class teak wood	1	cum	142949.70	142950.00
7.1.2	Sal wood	1	cum	116520.30	116520.00
7.2	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge. (Note: Butt hinges and necessary screws shall be paid separately)				
7.2.1	Second class teak wood				
7.2.1.1	35 mm thick shutters	1	sqm	4111.95	4112.00
7.2.1.2	30 mm thick shutters	1	sqm	3747.30	3747.00
7.3	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick.				
7.3.1	Second class teak wood	1	sqm	3323.20	3323.00
7.3.2	Float glass panes				
7.3.2.1	4 mm thick glass pane (weight not less than 10 kg/sqm).	10	sqm	2241.80	22418.00
7.3.2.2	5.0 mm thick glass panes (weight not less than 12.50 kg/sqm).	10	sqm	2600.45	26005.00
7.3.3	Fly proof stainless steel grade 304 wire gauge with 0.5 mm dia. wire and 1.4 mm wide aperture with matching wood beading	10	sqm	1800.45	18005.00
7.4	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.				
7.4.1	Second class teak wood				
7.4.1.1	35 mm thick	1	sqm	4940.20	4940.00
7.5	Extra for providing frosted glass panes 4 mm thick (weight not less than 10 kg per sqm) instead of ordinary float glass panes 4 mm thick (weight not less than 10 kg per sqm) in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	10	sqm	176.40	1764.00

7.6	Extra for providing ISI marked Stainless Steel butt hinges instead of M.S. pressed butt hinges bright finished of required size with necessary screws. (Shutter area to be measured).	1	sqm	193.55	194.00
7.7	Deduct for not providing hinges in doors, windows or clerestory window shutters with:				
7.7.1	ISI marked Stainless steel butt hinges with stainless steel screws:				
7.7.1.1	For 2nd class teak wood and other class of wood shutters	3	sqm	253.30	760.00
7.8	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
7.8.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	5	sqm	3473.85	17369.00
7.9	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
7.9.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	10	sqm	2392.65	23927.00
7.9.2	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws	10	sqm	2093.70	20937.00
7.1	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	10	sqm	462.35	4624.00
7.11	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):				
7.11.1	Rectangular or square	5	sqm	199.15	996.00
7.12	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	10	sqm	106.70	1067.00
7.13	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws :				
7.13.1	35 mm thick shutters				

7.13.1.1	with ISI marked M.S. pressed butt hinges bright finished of required size				
7.13.1.1.1	Second class teak wood	1	sqm	4852.30	4852.00
7.13.1.2	With ISI marked stainless steel butt hinges of required size				
7.13.1.2.1	Second class teak wood	1	sqm	5045.85	5046.00
7.14	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
7.14.1	Fixed to steel windows by welding	50	kg	219.10	10955.00
7.14.2	Fixed to openings /wooden frames with rawl plugs screws etc.	10	kg	238.35	2384.00
7.15	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62x19 mm beading of second class teak wood and priming coat with approved steel primer all complete.	50	sqm	1641.15	82058.00
7.16	Providing 40x5 mm flat iron hold fast 400 mm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 300x100x150 mm 1:3:6 mix (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	10	each	228.85	2289.00
7.17	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete (Copper oxidised as per IS 1378)				
7.17.1	300x16 mm	10	each	216.55	2166.00
7.17.2	250x16 mm	10	each	193.70	1937.00
7.18	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete (Copper oxidised as per IS 1378)				
7.18.1	250x10 mm	20	each	83.90	1678.00
7.18.2	200x10 mm	20	each	69.40	1388.00
7.18.3	150x10 mm	20	each	59.45	1189.00
7.18.4	100x10 mm	20	each	44.30	886.00
7.19	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete (Copper oxidised as per IS 1378)				
7.19.1	125 mm	20	each	39.95	799.00
7.19.2	100 mm	20	each	32.55	651.00
7.19.3	75 mm	20	each	29.70	594.00
7.2	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete (Copper oxidised as per IS 1378)				
7.20.1	150 mm	10	each	33.10	331.00

7.20.2	115 mm	10	each	29.70	297.00
7.21	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete (Copper oxidised as per IS 1378)				
7.21.1	300 mm weighing not less than 330 grams	10	each	67.40	674.00
7.21.2	250 mm weighing not less than 280 grams	10	each	61.05	611.00
7.21.3	200 mm weighing not less than 240 grams	10	each	53.95	540.00
7.22	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :				
7.22.1	125x64x1.90 mm	5	each	118.20	591.00
7.23	Providing and fixing IS: 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :				
7.23.1	125x64x2.50 mm	5	each	129.85	649.00
7.24	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	1	each	854.65	855.00
7.25	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles of approved quality with necessary screws etc. complete.	1	each	726.60	727.00
7.26	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	10	each	1124.85	11249.00
7.27	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	10	each	983.15	9832.00
7.28	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete :				
7.28.1	150 mm	10	each	139.10	1391.00
7.29	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :				
7.29.1	300x16 mm	10	each	303.25	3033.00
7.29.2	250x16 mm	10	each	260.60	2606.00

7.3	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
7.30.1	300x10 mm	10	each	130.10	1301.00
7.30.2	250x10 mm	10	each	115.15	1152.00
7.30.3	200x10 mm	10	each	99.70	997.00
7.30.4	150x10 mm	10	each	82.55	826.00
7.31	Providing and fixing aluminium pull bolt lock, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws bolts, nut and washers etc. complete.	10	each	100.80	1008.00
7.32	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
7.32.1	125 mm	20	each	66.25	1325.00
7.32.2	100 mm	20	each	59.55	1191.00
7.33	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
7.33.1	Single rubber stopper	20	each	39.60	792.00
7.33.2	Twin rubber stopper	40	each	72.35	2894.00
7.34	Providing and fixing aluminium casement stays, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.	10	each	71.50	715.00
7.35	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS: 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	5	each	868.95	4345.00
7.36	Providing and fixing 2nd class teak wood lipping/ moulded beading or taj beading of size 18X5 mm fixed with wooden adhesive of approved quality and screws/nails on the edges of the Pre-laminated particle board as per direction of Engineer-in-charge.	2	metre	102.15	204.00
7.37	Providing and fixing magnetic catcher of approved quality in cupboard/ ward robe shutters, including fixing with necessary screws etc. complete.				
7.37.1	Triple strip vertical type	2	each	52.50	105.00
7.37.2	Double strip (horizontal type)	10	each	39.70	397.00

7.38	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ± 1 mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1 mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer- in-charge				
7.38.1	Extruded section profile size 48x40 mm	50	metre	270.20	13510.00
7.38.2	Extruded section profile size 42x50 mm	20	metre	331.35	6627.00
7.39	Providing and fixing to existing door frames.				
7.39.1	24 mm thick factory made PVC door shutters made of styles cleats. The shutter frame filled and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm (± 0.2 mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm (± 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter).	30	sqm	2969.25	89078.00

7.39.2	30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	10	sqm	3253.80	32538.00
7.4	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing.				
7.40.1	30 mm thick pre laminated PVC door shutters	10	sqm	3663.80	36638.00

7.41	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.				
7.41.1	1.5 mm thick	20	sqm	1045.95	20919.00
7.41.2	1.0 mm thick	20	sqm	897.30	17946.00
7.42	Providing and fixing cup board shutters with 25 mm thick veneered particle board IS : 3097 marked, exterior grade (Grade I), of approved make, including IInd class teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of Engineer-in-Charge.				
7.42.1	With decorative veneering on one side and commercial veneering on other side	5	sqm	1927.50	9638.00
7.43	Providing and fixing, in position concealed G.I. section for wall paneling using board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm, placed @ 610 mm C/C in perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm C/C with fully threaded self-tapping dry wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200 mm C/C., all complete as per the drawing & directions of engineer-in-charge, the joints of the boards are finished with specially formulated jointing compound and 48 mm wide jointing tape to provide seamless finish.				
7.43.1	Multipurpose cement board reinforced with suitable fibre cement screw.				
7.43.1.1	8 mm thick cement fibre board, Type- B, Category- III as per IS: 14862 : 2000	5	sqm	1443.45	7217.00
7.44	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws:				
7.44.1	35 mm thick shutters				
7.44.1.1	with ISI marked M.S. pressed butt hinges bright finished of required size				
7.44.1.1.1	Second class teak wood	5	sqm	5024.15	25121.00
7.44.1.2	With ISI marked stainless steel butt hinges of required size				

7.44.1.2.1	Second class teak wood	5	sqm	5217.65	26088.00
7.44.2	30 mm thick shutters				
7.44.2.1	With ISI marked stainless steel butt hinges of required size				
7.44.2.1.1	Second class teak wood	2	sqm	4692.10	9384.00
7.45	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete.				
7.45.1	With 2nd class teak wood beading 62X19 mm	10	sqm	1597.15	15972.00
7.45.2	With 12 mm mild steel U beading	10	sqm	1228.00	12280.00
7.46	Providing and fixing stainless steel fancy handle of approved make fixed with SS screws etc. complete as per direction of Engineer-in-charge.				
7.46.1	200 mm	5	each	186.65	933.00
7.47	Providing and fixing stainless steel sof closing spring hinges at 0 degree hinges (hydraulic type) of approved make/brand to cupboard shutters with full threaded steel screws including making necessary recess in board and finished etc. complete as per direction of Engineer-in-charge.	10	each	272.00	2720.00
	Sub-Total				909777.00
8	STEEL WORK				
8.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	50	kg	117.35	5868.00
8.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	50	kg	133.70	6685.00
8.3	Providing and fixing 1 mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
8.3.1	Using M.S. angels 40x40x6 mm for diagonal braces	5	sqm	5804.35	29022.00

8.4	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.				
8.4.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	2	sqm	3653.20	7306.00
8.4.2	80x1.20 mm M.S. laths with 1.20 mm thick top cover	2	sqm	3307.05	6614.00
8.4.3	80x0.90 mm M.S. laths with 0.90 mm thick top cover	2	sqm	3191.35	6383.00
8.5	Extra for providing mechanical device chain and crank operation for operating rolling shutters.				
8.5.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area	2	sqm	1281.35	2563.00
8.5.2	Exceeding 16.80 sqm in area	2	sqm	1181.80	2364.00
8.6	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metal- sash putty of approved make, or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost).				
8.6.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	50	kg	82.45	4123.00
8.7	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D,F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, priming coat of approved steel primer, but excluding the cost of other fittings,glass panes complete all as per approved design, (sectional weight of only steel members shall be measured for payment).				
8.7.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	50	kg	131.05	6553.00
8.8	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				

8.8.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	50	kg	141.70	7085.00
8.9	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
8.9.1	Hot finished welded type tubes	50	kg	194.40	9720.00
8.1	Providing and fixing bolts including nuts and washers complete.	50	kg	159.35	7968.00
8.11	Welding by gas or electric plant including transportation of plant at site etc. complete.	50	cm	3.70	185.00
8.12	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
8.12.1	In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	100	kg	123.60	12360.00
8.12.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	50	kg	172.60	8630.00
8.13	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
8.13.1	M.S. tube	50	kg	196.80	9840.00
8.13.2	G.I. pipes	50	kg	203.05	10153.00
8.14	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm ²), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.				
8.14.1	10 x 60 mm	20	each	131.10	2622.00
8.14.2	10 x 80 mm	20	each	137.65	2753.00

8.15	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, bufing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	100	kg	772.40	77240.00
8.16	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.				
8.16.1	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	10	sqm	1133.55	11336.00
8.17	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with:				
8.17.1	4.0 mm thick glass panes	50	sqm	1064.65	53233.00
8.18	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat pieces to the existing T-iron frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-In-charge.	10	kg	130.50	1305.00
	Sub-Total				291911.00
9	FLOORING				
9.1	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks:				
9.1.1	1:6 (1cement :6 coarse sand)	10	sqm	965.55	9656.00
9.2	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
9.2.1	40 mm thick with 20 mm nominal size stone aggregate	50	sqm	614.20	30710.00
9.3	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement: 3 coarse sand), finished with a floating coat of neat cement.				
9.3.1	18 mm thick	5	sqm	662.05	3310.00

9.4	Cement concrete pavement with 1:2:4(1 cement: 2 coarse sand :4 graded stone aggregate 20 mm nominal size), including finishing complete.	5	cum	8595.15	42976.00
9.5	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 9 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume, including cement slurry etc. complete				
9.5.1	Medium shade pigment with 50% white cement and 50% ordinary cement	5	sqm	1085.45	5427.00
9.6	Marble chips skirting up to 30 cm height, rubbed and polished to granolithic finish, top layer 6 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement: 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix: 7 marble chips) by volume:				
9.6.1	18 mm thick with under layer 12 mm thick in cement plaster 1:3(1 cement: 3 coarse sand) :				
9.6.1.1	Medium shade pigment with 50% white cement and 50% ordinary cement	5	sqm	1873.65	9368.00
9.7	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.				
9.7.1	40 mm wide and 4 mm thick	100	metre	91.75	9175.00
9.8	Chequered precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).				
9.8.1	Medium shade pigment using 50% white cement 50% Grey cement	2	sqm	1328.35	2657.00
9.9	Marble stone flooring with 18 mm thick marble stone, as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry, including rubbing and polishing complete with :				
9.9.1	Udaipur green marble	5	sqm	2428.60	12143.00
9.1	Extra for pre finished nosing to treads of steps of marble stone.	5	metre	719.90	3600.00

9.11	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
9.11.1	25 mm thick	30	sqm	1948.25	58448.00
9.12	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	10	sqm	2354.70	23547.00
9.13	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) with joints 3 mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar.				
9.13.1	Red sand stone	5	sqm	1647.00	8235.00
9.14	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	5	metre	191.40	957.00
9.15	Extra for Kota stone/ sand stone in treads of steps and risers using single length above normal size up to 2.00 metre.	5	sqm	44.15	221.00
9.16	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement :4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	5	sqm	1096.55	5483.00
9.17	Providing and fixing 1st quality ceramic glazed floor tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	50	sqm	1112.70	55635.00

9.18	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.				
9.18.1	Size of Tile 600x600 mm	20	sqm	1553.45	31069.00
9.19	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
9.19.1	Double charge vitrified tile polished finish of size				
9.19.1.1	Size of Tile 600 x 600 mm	20	sqm	1453.65	29073.00
9.19.1.2	Size of Tile 600 x 1200 mm	2	sqm	1577.15	3154.00
9.2	Deduct for not using 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) bedding in laying of floor tiles and jointing with grey cement slurry @ 3.3 kg/ sqm.	10	sqm	850.10	8501.00
9.21	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3 mm thickness.	10	sqm	753.25	7533.00
9.22	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.				
9.22.1	Size of Tile 600x600 mm	10	sqm	1623.05	16231.00
9.22.2	Size of Tile 800x800 mm	10	sqm	1958.45	19585.00

9.23	Providing and laying Vitrified tiles in diferent sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).				
9.23.1	Size of Tile 600x600 mm	10	sqm	1893.90	18939.00
9.24	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.				
9.24.1	Size of Tile 600x600 mm	10	sqm	309.05	3091.00
9.24.2	Size of Tile 1000x1000 mm	10	sqm	174.50	1745.00
9.25	Providing and laying Vitrified tiles in floor with diferent sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).				
9.25.1	Size of Tile 600x600 mm	10	sqm	1725.35	17254.00
9.26	Providing and laying full body vitrified tile in floor of minimum thickness 15 mm with water absorption less than 0.06% and conforming to IS:15622, of approved make, brand and manufacturer, laid on 20 mm thick base cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.30 kg / sqm including grouting the joints with white cement and matching pigments etc. The slab must be cut with the zero chipping diamond cutter only. Laying of slab will be done with the help of notch trowel, wedge, clips of required thickness, vacuum cups for lifting, leveling system and rubber mallet for placing the slab gently and easily. Size of tile 800x2400 mm of all colours and shades.	10	sqm	3623.95	36240.00

9.27	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge :				
9.27.1	Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	5	sqm	3186.70	15934.00
	Sub-Total				489897.00
10	ROOFING				
10.1	Providing corrugated G.S. sheet roofing including vertical/curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
10.1.1	0.80 mm thick with zinc coating not less than 275 gm/m ²	10	sqm	1257.55	12576.00
10.1.2	0.63 mm thick with zinc coating not less than 275 gm/ m ²	10	sqm	1087.65	10877.00
10.2	Extra for straight cutting in C.G.S. sheet roofing for making opening of area exceeding 40 sq. decimeter for chimney stacks, sky light etc.:				
10.2.1	0.63 mm thick	5	metre	92.95	465.00
10.3	Providing ridges or hips of width 60 cm overall width plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete.				
10.3.1	0.80 mm thick with zinc coating not less than 275 gm/m ²	5	metre	1083.30	5417.00
10.3.2	0.63 mm thick with zinc coating not less than 275 gm/m ²	5	metre	980.50	4903.00
10.4	Extra for providing and fixing wind ties of 40x 6 mm flat iron section.	10	metre	195.60	1956.00
10.5	Providing and laying brick tiles over mumty roofs, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over 12 mm layer of cement mortar 1:3 (1 cement: 3 fine sand) and finished neat:				

10.5.1	With common burnt clay F.P.S. (non modular) brick tiles of class designation 10	5	sqm	607.40	3037.00
10.6	Providing gola 75x75 mm in cement concrete 1:2:4(1 cement :2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement: 3 fine sand) as per standard design :				
10.6.1	In 75x75 mm deep chase	25	metre	305.15	7629.00
10.7	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	10	each	298.25	2983.00
10.8	Providing and fixing M.S. holder bat clamps of approved design to C.I. or S.C.I. rain water pipes embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and cost of cutting holes and making good the walls etc. :				
10.8.1	100 mm diameter	6	each	362.85	2177.00
10.9	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
10.9.1	110 mm diameter	50	metre	377.40	18870.00
10.1	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS :5382, leaving 10 mm gap for thermal expansion.				
10.10.1	Coupler				
10.10.1.1	110 mm	10	each	136.15	1362.00
10.10.2	Single pushfit Coupler				
10.10.2.1	110 mm	10	each	127.60	1276.00
10.10.3	Single tee with door				
10.10.3.1	110x110x110 mm	10	each	234.15	2342.00
10.10.4	Single tee without door				
10.10.4.1	110x110x110 mm	10	each	221.35	2214.00
10.10.5	Bend 87.5°				
10.10.5.1	110 mm bend	10	each	150.35	1504.00
10.10.6	Shoe (Plain)				

10.10.6.1	110 mm Shoe	10	each	131.85	1319.00
10.11	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
10.11.1	110 mm	10	each	371.30	3713.00
10.12	Providing and fixing false ceiling at all heights including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50 mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25 mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, difusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :				
10.12.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) :2011 (Board with BIS certification marks)	5	sqm	1355.80	6779.00
10.12.2	12.5 mm thick tapered edge gypsum moisture resistant board	5	sqm	1529.10	7646.00
10.12.3	Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm having approx. 15 % perforated area with perforation size and pattern as approved by the Engineer- in charge and as per manufacturer's specification, with all 4 sides tapered and backed by acoustical tissue with NRC value not less than 0.60	5	sqm	1744.15	8721.00

10.13	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'S or 'L' hooks, bolts & nuts 8 mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovings incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.				
10.13.1	2 mm thick corrugated (2.5" Or 4.2" or 6") or step-down (2" or 3" or 6") as specified	10	sqm	1401.35	14014.00
10.14	Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05mm) with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	50	sqm	738.65	36933.00
10.15	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like difusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				

10.15.1	12.5 mm thick fully Perforated Gypsum Board tile made from plasterboard having glass fibre conforming to IS: 2095 part I, of size 595x595 mm, having perforation of 9.7x9.7 mm at 19.4 mm c/c with center borders of 48 mm and the side borders of 30 mm, backed with non woven tissue on the back side, having an NRC (Noise Reduction Coeficient) of 0.79	10	sqm	1528.00	15280.00
10.16	Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the sofit with the help of sofit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with the help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring T with :				
10.16.1	GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted afer bending.	5	sqm	2221.70	11109.00
10.17	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8183 having density 24 kg/m3, 50 mm thick, wrapped in 200G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.	5	sqm	358.50	1793.00
	Sub-Total				186895.00
11	FINISHING				
11.1	12 mm cement plaster of mix:				
11.1.1	1:6 (1 cement: 6 coarse sand)	75	sqm	343.65	25774.00
11.2	15 mm cement plaster on rough side of single or half brick wall of mix:				
11.2.1	1:6(1 cement: 6 coarse sand)	75	sqm	395.35	29651.00
11.3	20 mm cement plaster of mix:				
11.3.1	1:6(1 cement: 6 coarse sand)	20	sqm	466.05	9321.00

11.4	Cement plaster 1:3(1 cement: 3 coarse sand) finished with a floating coat of neat cement.				
11.4.1	12 mm cement plaster	10	sqm	449.55	4496.00
11.5	15 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall.	5	sqm	506.60	2533.00
11.6	6 mm cement plaster of mix:				
11.6.1	1:3(1 cement :3 fine sand)	10	sqm	300.45	3005.00
11.7	6 mm cement plaster 1:3 (1 cement: 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of R.C.C. slabs and beams.	5	sqm	396.65	1983.00
11.8	Neat cement punning.	10	sqm	79.95	800.00
11.9	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	5	per bag of 50kg cement used in the mix	22.10	111.00
11.1	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	50	sqm	262.70	13135.00
11.11	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand):				
11.11.1	Flush / Ruled/ Struck or weathered pointing	100	sqm	257.35	25735.00
11.12	Pointing on tile brick work with cement mortar 1:3 (1 cement: 3 fine sand):				
11.12.1	Flush/ Ruled/ Struck or weathered pointing	50	sqm	350.20	17510.00
11.13	White washing with lime to give an even shade:				
11.13.1	New work (three or more coats)	50	sqm	39.05	1953.00
11.14	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour:				
11.14.1	New work (two or more coats) over and including water thinnable priming coat with cement primer having VOC content less than 50 gram/litre	500	sqm	185.65	92825.00
11.15	Finishing walls with water proofing cement paint of required shade:				
11.15.1	New work (Two or more coats applied @ 3.84 kg/10 sqm)	50	sqm	116.90	5845.00
11.16	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				

11.16.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	300	sqm	171.10	51330.00
11.17	Applying priming coat:				
11.17.1	With ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood	10	sqm	74.65	747.00
11.17.2	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	20	sqm	67.40	1348.00
11.17.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat)	20	sqm	36.10	722.00
11.18	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 surface, etc. complete.				
11.18.1	On steel work	5	sqm	241.75	1209.00
11.18.2	On concrete work	5	sqm	235.15	1176.00
11.19	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture, over and including a priming of ready mixed zinc chromate yellow primer on new work:				
11.19.1	100 mm diameter pipes	5	metre	76.35	382.00
11.2	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
11.20.1	Two or more coats on new work	100	sqm	155.90	15590.00
11.21	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
11.21.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	100	sqm	226.25	22625.00
11.22	French spirit polishing :				
11.22.1	Two or more coats on new works including a coat of wood filler	10	sqm	446.25	4463.00
11.23	Lettering with black Japan paint of approved brand and manufacture	100	per letter per cm height	6.15	615.00
11.24	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :				

11.24.1	15 mm wide and 15 mm deep groove	50	metre	75.15	3758.00
11.25	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	500	sqm	156.05	78025.00
11.26	Distempering with 1st quality acrylic distemper (ready mixed) having VOC (Volatile Organic Compound) content less than 50 gram/ litre, of approved brand and manufacturer including applying additional coats wherever required to achieve even shade and colour				
11.26.1	Old work (one or more coats)	3000	sqm	62.70	188100.00
11.27	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.				
11.27.1	One coat	500	sqm	92.00	46000.00
11.27.2	Two coats	500	sqm	137.45	68725.00
11.28	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
11.28.1	One coat	100	sqm	95.45	9545.00
11.28.2	Two coats	100	sqm	142.80	14280.00
11.29	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
11.29.1	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	20	sqm	70.35	1407.00
11.29.2	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	50	sqm	73.95	3698.00
11.3	White washing with lime to give an even shade:				
11.30.1	Old work (two or more coats)	200	sqm	22.85	4570.00
11.30.2	Old work (one or more coats)	200	sqm	13.90	2780.00
11.31	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	200	sqm	19.75	3950.00
11.32	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	1000	sqm	25.15	25150.00

11.33	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture over and including a priming coat of ready mixed zinc chromate yellow primer on new work:				
11.33.1	75 mm diameter pipes	50	metre	57.25	2863.00
11.34	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
11.34.1	One or more coats on old work	1000	sqm	102.80	102800.00
11.35	French spirit polishing :				
11.35.1	One or more coats on old work	50	sqm	224.80	11240.00
11.36	Re-lettering with black Japan paint of approved brand and manufacture.	100	per letter per cm height	3.85	385.00
11.37	Finishing walls with water proofing cement paint of required shade:				
11.37.1	Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litres/10 sqm complete including cost of Priming coat.	100	sqm	112.90	11290.00
11.38	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
11.38.1	Old work (Two or more coats applied @ 1.43 V/ 10 sqm) over existing cement paint surface	500	sqm	131.30	65650.00
11.38.2	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	500	sqm	88.55	44275.00
11.39	Melamine polishing on wood work (one or more coat).	1	sqm	138.10	138.00
	Sub-Total				1023513.00
12	REPAIRS TO BUILDING				
12.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
12.1.1	With cement mortar 1:4 (1cement: 4 coarse sand)	50	sqm	560.50	28025.00

12.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
12.2.1	Door chowkhats	3	each	1782.55	5348.00
12.2.2	Window chowkhats	3	each	1125.15	3375.00
12.3	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface including disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per direction of Engineer-in-Charge.				
12.3.1	For door/ window/ clerestory window	5	sqm	1264.35	6322.00
12.4	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				
12.4.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	50	sqm	1090.65	54533.00
12.5	Renewing glass panes, with wooden fillets wherever necessary:				
12.5.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	5	sqm	1580.90	7905.00
12.6	Renewal of old putty of glass panes (length)	50	metre	56.15	2808.00
12.7	Refixing old glass panes with putty and nails	50	sqm	729.85	36493.00
12.8	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or replastering, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.	5	sqm	72.45	362.00
12.9	Flush pointing with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska :				
12.9.1	With F.P.S. brick tiles	7.5	sqm	137.70	1033.00
12.1	Renewing Wrought iron or M.S. Wheel or roller of steel door or gate and fitting and fixing the same with necessary clamps, nuts and bolts/welding and erection etc. complete.				
12.10.1	Wheel 50 mm dia and below	3	per wheel	123.70	371.00

12.10.2	Wheel above 50 mm dia	3	per wheel	304.55	914.00
12.11	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube chollies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after. The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge. The elevational area of the scaffolding shall be measured for payment purpose. The payment will be made once irrespective of duration of scaffolding. Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.	100	sqm	338.25	33825.00
12.12	Cleaning of terrace/loft water storage tank (inside surface area) upto 2000 litre capacity at all heights with coconut brushes, duster etc., removal of silt, rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5gm per litre capacity of tank including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba all complete as per direction of Engineer- in-Charge. (The old date already written on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs. 0.10 per litre) (if during cleaning any GI fittings or ball cock is damaged that is to be repaired by contractor at his own cost and nothing extra will be paid on this account)	1000	litre	0.50	500.00
12.13	Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:- (i)Tank shall be emptied of water by pumping & bottom shall be cleaned of silt and other deposits. (ii) Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water. (iii) Chlorination of RCC internal surface by liquid chlorine. (iv) The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface. (v) Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.	400	sqm	84.85	33940.00
12.14	Disconnecting damaged overhead/terrace PVC water storage tank of any size from water supply line and removing from the terrace including shifting at ground level as per direction of Engineer-in-charge.	5	each	433.75	2169.00

12.15	Providing & fixing White vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material including malba, all complete as per the direction of Engineer-in charge.				
12.15.1	Orissa pattern W.C Pan of size 580x440 mm	10	each	4478.75	44788.00
12.16	Cutting holes of required size in brick masonry wall for fixing of exhaust fan including providing and fixing 300 mm dia PVC pipe conforming BIS-12818 and making good the same etc. complete as per direction of Engineer-in- charge.	5	each	288.10	1441.00
12.17	Dismantling W.C. Pan of all sizes including disposal of dismantled materials including malba all complete as per directions of Engineer-in-Charge.	10	each	134.10	1341.00
12.18	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	50	sqm	3.45	173.00
12.19	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge. (a) Internal Work- Exposed on wall	50	metre	3.25	163.00
12.2	Taking out existing wooden door shutter, repair by cutting, painting etc. and refixing of repaired door shutters to existing door frames, including replacement of hinges with screws, etc. as required, all complete as per the direction of the Engineer-in-charge.	10	each	429.10	4291.00
12.21	Extra for covering top of membrane with Geotextile, 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation.	5	sqm	88.90	445.00
	Sub-Total				270565.00
13	Dismantling and Demolishing				
13.1	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer- in-charge.	1	cum	851.50	852.00
13.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
13.2.1	Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	1	cum	2434.25	2434.00
13.2.2	Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	1	cum	1503.60	1504.00

13.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	1	cum	3551.25	3551.00
13.4	Demolishing R.B. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in- charge.	1	cum	3177.25	3177.00
13.5	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	10	sqm	1147.20	11472.00
13.6	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
13.6.1	In cement mortar	2	cum	2060.20	4120.00
13.7	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured):				
13.7.1	From brick work in cement mortar	1	1000 Nos	6700.80	6701.00
13.8	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
13.8.1	Of area 3 sq. metres and below	5	each	367.20	1836.00
13.8.2	Of area beyond 3 sq. metres	3	each	502.75	1508.00
13.9	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :				
13.9.1	Of area 3 sq. metres and below	5	each	143.50	718.00
13.9.2	Of area beyond 3 sq. metres	5	each	188.90	945.00
13.1	Dismantling steel work in single sections including dismembering and stacking within 50 metres lead in:				
13.10.1	Channels, angles, tees and flats	25	kg	2.30	58.00
13.11	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	5	kg	5.65	28.00
13.12	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	5	kg	3.85	19.00

13.13	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
13.13.1	For thickness of tiles 10 mm to 25 mm	25	sqm	73.40	1835.00
13.13.2	For thickness of tiles above 25 mm and up to 40 mm	5	sqm	113.35	567.00
13.14	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	10	sqm	266.45	2665.00
13.15	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	10	sqm	105.35	1054.00
13.16	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:				
13.16.1	G.S. Sheet	10	sqm	164.95	1650.00
13.17	Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of:				
13.17.1	T' or 'L' iron or pipe	10	each	230.90	2309.00
13.18	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	50	kg	36.80	1840.00
13.19	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :				
13.19.1	15 mm to 40 mm nominal bore	25	metre	149.80	3745.00
13.2	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge:				
13.20.1	Up to 150 mm diameter	10	metre	332.40	3324.00
13.21	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	5	each	112.05	560.00
13.22	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	75	sqm	54.65	4099.00

13.23	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	15	cum	263.95	3959.00
	Sub-Total				66530.00
14	ROAD WORK				
14.1	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres.				
14.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5	metre	194.30	972.00
14.2	Brick edging laid lengthwise with half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres :				
14.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5	metre	53.45	267.00
14.3	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used.				
14.3.1	With G.I. barbed wire	200	metre	22.10	4420.00
14.4	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	25	kg	125.75	3144.00

14.5	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer- in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately). Note:- Cement content considered in M-30 is @ 340 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately.				
14.5.1	Cement concrete manufactured in automatic batching plant (RMC plant) including transportation to site in transit mixer	0.5	cum	11098.45	5549.00
14.6	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, including cleaning the surface of ail dirt, scales, oil, grease and other foreign material etc. and lining out complete.				
14.6.1	New work (Two or more coats)	10	sqm	188.20	1882.00
14.6.2	Old work (One or more coats)	10	sqm	120.80	1208.00
14.7	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	10	sqm	972.00	9720.00
14.8	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5 mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured to calculate volume for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	5	cum	10117.60	50588.00
14.9	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in- charge.				

14.9.1	Made of G.I. wire of dia 4 mm	5	sqm	1017.80	5089.00
14.1	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer- in-Charge.				
14.10.1	With material conforming to Grade-II (size range 53 mm to 0.075 mm) having CBR Value-25	5	cum	2924.85	14624.00
14.11	Providing and erecting 2.00 metre high temporary barricading at site; each panel of size 2.50 m x2.00 m made of 40x40x6 mm angle iron or 50x50x3 mm hollow MS tube posts/horizontal members/bracings covered with 1.63 mm thick MS sheet. The sheet shall be fixed with 30x5 mm MS flat by suitable welding/riveting. The panels shall be made so that gap of 50cm above the ground is available making overall height as 2.5 m. MS channel ISLC 75 @ 5.70 kg/m, 50 cm long shall be provided at the bottom having oval shaped holes of size 50x25 mm at both ends with 50 cm long MS angle 40x40x6 mm bracing. Suitable arrangement shall be made to fix the barricading to avoid from overturning by providing 250 mm long expansion fasteners at both ends. The work shall be executed as per drawing/direction of Engineer-in-Charge which includes writing and painting, arrangement for traffic diversion such as traffic signals during construction at site for day and night, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in-Charge. The barricading provided shall be retained in position at site continuously including shifting of barricading from one location to another location as many times as required during the execution of the entire work till its completion. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipments and works required to execute the job. The barricading shall not	10	metre	3439.50	34395.00
14.12	Taking out existing kerb stones of all types from footpath/ central verge, including removal of mortar etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	10	metre	39.35	394.00
14.13	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	10	sqm	131.75	1318.00

14.14	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).	10	sqm	402.95	4030.00
14.15	Laying at or near ground level old kerb stones of all types in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement : 3 coarse sand), including making joints with or without grooves (thickness of joints, except at sharp curve, shall not be more than 5 mm), including making drainage opening wherever required etc. complete as per direction of Engineer-in-charge. (Length of finished kerb edging shall be measured for payment). (Old kerb stones shall be supplied by the department free of cost)	10	metre	109.45	1095.00
14.16	Providing and laying matt finished vitrified tile of size 100x100x16 mm having water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in out door floors such as footpath, court yard multi models etc., laid on 20 mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as direction of Engineer-in-Charge.	1	sqm	2159.85	2160.00
14.17	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8 mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20 mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	1	sqm	2017.60	2018.00

14.18	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50 mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.				
14.18.1	60 mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	3	sqm	1045.65	3137.00
14.18.2	80 mm thick C.C. paver block of M-35 grade with approved colour design and pattern.	3	sqm	1091.50	3275.00
	Sub-Total				149285.00
15	SANITARY INSTALLATIONS				
15.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
15.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	5	each	6767.40	33837.00
15.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :				
15.2.1	W.C. pan with ISI marked white solid plastic seat and lid	5	each	6515.55	32578.00
15.3	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
15.3.1	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	3	each	1879.20	5638.00

15.4	Providing and fixing wash basin with C.I. brackets, 15 mm dia CP Brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required:- (a) White Vitreous China Wash basin size 550x400 mm with a 15 mm CP Brass single hole basin mixer	1	each	3960.55	3961.00
15.5	Providing and fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls wherever required:				
15.5.1	White glazed fire clay kitchen sink of size 600x450x 250 mm	1	each	3892.75	3893.00
15.6	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :				
15.6.1	Kitchen sink with drain board				
15.6.1.1	510x1040 mm bowl depth 250 mm	1	each	6945.60	6946.00
15.6.1.2	510x1040 mm bowl depth 225 mm	1	each	7514.65	7515.00
15.6.1.3	510x1040 mm bowl depth 200 mm	1	each	7159.00	7159.00
15.6.2	Kitchen sink without drain board				
15.6.2.1	610x510 mm bowl depth 200 mm	1	each	4940.80	4941.00
15.7	Providing and fixing white vitreous china water closet squatting pan (Indian type) :				
15.7.1	Long pattern W.C. pan of size 580 mm	5	each	1959.80	9799.00
15.7.2	Orissa pattern W.C. pan of size 580x440 mm	5	each	3169.05	15845.00
15.8	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	5	each	2784.95	13925.00
15.9	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	10	each	349.15	3492.00
15.1	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet :				
15.10.1	250x130x30 mm	2	pair	244.85	490.00
15.11	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.				
15.11.1	10 litre capacity - White	10	each	1190.65	11907.00
15.12	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :				
15.12.1	White solid plastic seat with lid	10	each	684.85	6849.00

15.12.2	Black solid plastic seat with lid	10	each	552.55	5526.00
15.13	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C. pan.	3	each	142.85	429.00
15.14	Providing and fixing CP Brass 32 mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	10	each	1034.80	10348.00
15.15	Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer in charge. (a) 15 mm nominal dia	1	each	6940.75	6941.00
15.16	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm or 340x410x265 mm sizes respectively.	1	each	1648.95	1649.00
15.17	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings :				
15.17.1	Size 450x300x150 mm	1	each	2512.75	2513.00
15.17.2	Size 600x450x200 mm	1	each	4077.65	4078.00
15.18	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
15.18.1	Flexible pipe				
15.18.1.1	32 mm dia	20	each	119.55	2391.00
15.18.1.2	40 mm dia	20	each	119.55	2391.00
15.19	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	5	each	1607.95	8040.00
15.2	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
15.20.1	Rectangular shape 1500x450 mm	1	each	2093.00	2093.00
15.21	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	1	each	1083.50	1084.00
15.22	Providing and fixing toilet paper holder :				
15.22.1	C.P. brass	5	each	803.70	4019.00
15.23	Providing and fixing soil, waste and vent pipes :				
15.23.1	100 mm dia				
15.23.1.1	Sand cast iron S&S pipe as per IS: 1729	10	metre	1151.90	11519.00
15.23.1.2	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	10	metre	1180.75	11808.00
15.23.2	75 mm diameter :				
15.23.2.1	Sand cast iron S&S pipe as per IS: 1729	5	metre	1044.75	5224.00

15.24	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :				
15.24.1	For 100 mm dia pipe	10	each	362.85	3629.00
15.25	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
15.25.1	100 mm dia				
15.25.1.1	Sand cast iron S&S as per IS - 1729	5	each	598.50	2993.00
15.25.1.2	Sand cast iron S&S as per IS - 3989	5	each	705.20	3526.00
15.25.2	75 mm dia				
15.25.2.1	Sand cast iron S&S as per IS - 1729	5	each	501.45	2507.00
15.25.2.2	Sand cast iron S&S as per IS- 3989	5	each	522.80	2614.00
15.26	Providing and fixing plain bend of required degree.				
15.26.1	100 mm dia				
15.26.1.1	Sand cast iron S&S as per IS - 1729	5	each	470.45	2352.00
15.26.1.2	Sand cast iron S&S as per IS : 3989	5	each	570.05	2850.00
15.26.2	75 mm dia				
15.26.2.1	Sand cast iron S&S as per IS -1729	5	each	376.25	1881.00
15.26.2.2	Sand cast iron S&S as per IS - 3989	5	each	390.50	1953.00
15.27	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
15.27.1	100x100x100 mm				
15.27.1.1	Sand cast iron S&S as per IS - 1729	5	each	726.55	3633.00
15.27.1.2	Sand cast iron S&S as per IS - 3989	5	each	925.70	4629.00
15.27.2	75x75x75 mm				
15.27.2.1	Sand cast iron S&S as per IS - 1729	5	each	629.50	3148.00
15.27.2.2	Sand cast iron S&S as per IS - 3989	5	each	665.05	3325.00
15.28	Providing and fixing single equal plain junction of required degree :				
15.28.1	100x100x100 mm				
15.28.1.1	Sand cast iron S&S as per IS - 1729	5	each	626.95	3135.00
15.28.1.2	Sand cast iron S&S as per IS - 3989	5	each	811.90	4060.00
15.29	Providing and fixing terminal guard :				
15.29.1	100 mm				
15.29.1.1	Sand cast iron S&S as per IS - 1729	5	each	442.00	2210.00
15.29.1.2	Sand cast iron S&S as per IS - 3989	5	each	506.00	2530.00
15.29.2	75 mm				
15.29.2.1	Sand cast iron S&S as per IS - 1729	5	each	340.70	1704.00
15.29.2.2	Sand cast iron S&S as per IS - 3989	5	each	404.75	2024.00
15.3	Providing and fixing collar :				
15.30.1	100 mm				

15.30.1.1	Sand cast iron S&S as per IS - 1729	5	each	463.35	2317.00
15.30.1.2	Sand cast iron S&S as per IS - 3989	5	each	513.15	2566.00
15.30.2	75 mm				
15.30.2.1	Sand cast iron S&S as per IS - 1729	5	each	305.15	1526.00
15.31	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter :				
15.31.1	100 mm	10	each	622.50	6225.00
15.31.2	75 mm	10	each	526.25	5263.00
15.32	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
15.32.1	100 mm inlet and 100 mm outlet				
15.32.1.1	Sand cast iron S&S as per IS: 3989	5	each	1996.50	9983.00
15.32.1.2	Sand Cast Iron S&S as per IS: 1729	5	each	1683.55	8418.00
15.32.2	100 mm inlet and 75 mm outlet				
15.32.2.1	Sand cast iron S&S as per IS - 3989	5	each	1975.15	9876.00
15.32.2.2	Sand Cast Iron S&S as per IS- 1729	5	each	1558.35	7792.00
15.33	Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :				
15.33.1	50 mm dia	5	metre	336.00	1680.00
15.34	Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo Indian W.C pan) with seat & lid fixed with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40 mm flush bend, 20 mm over flow pipe, with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:				
15.34.1	White vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and C.P. flush bend.	1	each	11847.65	11848.00
15.35	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	1	each	14999.15	14999.00

15.36	Providing and fixing floor mounted, white vitreous china single piece, double traps syphonic water closet of approved brand/make, shape, size and pattern including integrated white vitreous china cistern of capacity 10 litre with dual flushing system, including all fittings and fixtures with seat cover, cistern fittings, nuts, bolts and gasket etc including making connection with the existing P/S trap, complete in all respect as per directions of Engineer-in-Charge.	1	each	18212.90	18213.00
	Sub-Total				404237.00
16	WATER SUPPLY				
16.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply and all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall				
16.1.1	15 mm nominal dia Pipes	5	metre	286.80	1434.00
16.1.2	20 mm nominal dia Pipes	5	metre	335.00	1675.00
16.1.3	25 mm nominal dia Pipes	5	metre	401.55	2008.00
16.1.4	32 mm nominal dia Pipes	5	metre	518.75	2594.00
16.1.5	40 mm nominal dia Pipes	5	metre	702.95	3515.00
16.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings and fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.				
16.2.1	15 mm nominal dia Pipes	5	metre	497.80	2489.00
16.2.2	20 mm nominal dia Pipes	5	metre	537.60	2688.00
16.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work				
16.3.1	25 mm nominal dia Pipes	6	metre	355.40	2132.00
16.4	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work - Exposed on wall				

16.4.1	15 mm dia nominal bore	10	metre	366.40	3664.00
16.4.2	20 mm dia nominal bore	10	metre	437.30	4373.00
16.4.3	25 mm dia nominal bore	10	metre	551.70	5517.00
16.4.4	32 mm dia nominal bore	10	metre	667.00	6670.00
16.4.5	40 mm dia nominal bore	10	metre	811.90	8119.00
16.4.6	50 mm dia nominal bore	10	metre	1048.35	10484.00
16.5	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, including making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :				
16.5.1	15 mm dia nominal bore	10	metre	580.45	5805.00
16.5.2	20 mm dia nominal bore	10	metre	635.20	6352.00
16.6	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				
16.6.1	15 mm dia nominal bore	10	metre	322.15	3222.00
16.6.2	20 mm dia nominal bore	10	metre	368.60	3686.00
16.6.3	25 mm dia nominal bore	10	metre	467.75	4678.00
16.6.4	32 mm dia nominal bore	10	metre	540.30	5403.00
16.6.5	40 mm dia nominal bore	10	metre	617.05	6171.00
16.7	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
16.7.1	25 to 40 mm nominal bore	10	each	911.90	9119.00
16.8	Providing and fixing brass bib cock of approved quality :				
16.8.1	15 mm nominal bore	10	each	353.25	3533.00
16.9	Providing and fixing brass stop cock of approved quality :				
16.9.1	15 mm nominal bore	10	each	353.25	3533.00
16.1	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
16.10.1	25 mm nominal bore	10	each	622.40	6224.00
16.10.2	20 mm nominal bore	10	each	539.95	5400.00
16.10.3	32 mm nominal bore.	3	each	689.60	2069.00
16.10.4	40 mm nominal bore	3	each	826.10	2478.00
16.10.5	50 mm nominal bore	3	each	1026.65	3080.00
16.11	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
16.11.1	15 mm nominal bore	5	each	406.85	2034.00
16.11.2	20 mm nominal bore	2	each	462.50	925.00
16.11.3	25 mm nominal bore	3	each	464.05	1392.00
16.12	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
16.12.1	25 mm nominal bore				
16.12.1.1	Horizontal	2	each	591.40	1183.00
16.12.2	32 mm nominal bore				
16.12.2.1	Horizontal	2	each	791.90	1584.00
16.12.3	40 mm nominal bore				
16.12.3.1	Horizontal	2	each	952.60	1905.00

16.13	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :				
16.13.1	15 mm nominal bore	1	each	329.30	329.00
16.13.2	20 mm nominal bore	1	each	380.00	380.00
16.14	Providing and fixing uplasticised PVC connection pipe with brass unions :				
16.14.1	30 cm length				
16.14.1.1	15 mm nominal bore	10	each	85.00	850.00
16.14.2	45 cm length				
16.14.2.1	15 mm nominal bore	10	each	97.75	978.00
16.15	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in reinforced cement concrete slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size), including necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :				
16.15.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	2	each	1992.60	3985.00
16.16	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work :				
16.16.1	15 mm diameter pipe	1	metre	19.40	19.00
16.16.2	20 mm diameter pipe	10	metre	23.25	233.00
16.16.3	25 mm diameter pipe	10	metre	30.25	303.00
16.16.4	32 mm diameter pipe	10	metre	36.35	364.00
16.17	Repainting G.I. pipes and fittings with synthetic enamel white paint with one coat of approved quality :				
16.17.1	15 mm diameter pipe	10	metre	9.50	95.00
16.17.2	20 mm diameter pipe	10	metre	11.30	113.00
16.17.3	25 mm diameter pipe	10	metre	14.40	144.00
16.17.4	32 mm diameter pipe	10	metre	17.25	173.00
16.17.5	40 mm diameter pipe	10	metre	20.00	200.00
16.17.6	50 mm diameter pipe	10	metre	23.85	239.00
16.18	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
16.18.1	15 mm diameter pipe	10	metre	12.05	121.00
16.18.2	20 mm diameter pipe	10	metre	14.45	145.00
16.18.3	25 mm diameter pipe	10	metre	18.35	184.00
16.18.4	32 mm diameter pipe	10	metre	22.20	222.00

16.19	Providing and filling sand of grading zone V or coarser grade, allround the G.I. pipes in external work :				
16.19.1	15 mm diameter pipe	10	metre	154.45	1545.00
16.19.2	20 mm diameter pipe	10	metre	156.55	1566.00
16.19.3	25 mm diameter pipe	10	metre	160.70	1607.00
16.19.4	32 mm diameter pipe	10	metre	164.90	1649.00
16.2	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				
16.20.1	15 mm nominal bore	5	each	318.35	1592.00
16.20.2	20 mm nominal bore	5	each	346.80	1734.00
16.20.3	25 mm nominal bore	5	each	439.25	2196.00
16.20.4	32 mm nominal bore	5	each	489.05	2445.00
16.20.5	40 mm nominal bore	5	each	631.30	3157.00
16.20.6	50 mm nominal bore	5	each	823.80	4119.00
16.21	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
16.21.1	15 mm nominal bore	5	each	829.45	4147.00
16.21.2	20 mm nominal bore	5	each	857.85	4289.00
16.22	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	1500	per litre	11.00	16500.00
16.23	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :				
16.23.1	15 mm nominal bore	10	each	506.80	5068.00
16.24	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
16.24.1	15 mm nominal bore	5	each	820.70	4104.00
16.25	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
16.25.1	15 mm nominal bore	10	each	798.95	7990.00
16.26	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				
16.26.1	15 mm nominal bore	5	each	670.45	3352.00
16.27	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
16.27.1	15 mm nominal bore	10	each	574.30	5743.00

16.28	Providing and fixing C.P. Brass extension nipple (size 15 mm x 50 mm) of approved make and quality as per direction of Engineer-in-charge.	10	each	74.80	748.00
16.29	Providing and fixing PTMT bib cock of approved quality and colour.				
16.29.1	15 mm nominal bore, 122 mm long, weighing not less than 99 gms	2	each	161.20	322.00
16.3	Providing and fixing PTMT grating of approved quality and colour.				
16.30.1	Circular type				
16.30.1.1	100 mm nominal dia	5	each	37.60	188.00
16.30.1.2	125 mm nominal dia with 25 mm waste hole	5	each	51.85	259.00
16.31	Cutting holes up to 30x30 cm in walls including making good the same:				
16.31.1	With common burnt clay F.P.S. (non modular) bricks	5	each	416.80	2084.00
16.32	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	5	each	452.00	2260.00
16.33	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	15	metre	202.90	3044.00
	Sub-Total				227923.00
17	DRAINAGE				
17.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :				
17.1.1	100 mm diameter	5	metre	443.60	2218.00
17.1.2	150 mm diameter	5	metre	695.80	3479.00
17.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :				
17.2.1	100 mm diameter S.W. pipe	5	metre	964.75	4824.00
17.2.2	150 mm diameter S.W. pipe	2	metre	1179.85	2360.00
17.3	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:				
17.3.1	100x100 mm size P type				

17.3.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	each	2707.65	5415.00
17.3.2	150 x 100 mm size P type				
17.3.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	each	2734.20	5468.00
17.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps :				
17.4.1	100 mm diameter	5	metre	89.00	445.00
17.4.2	150 mm diameter	5	metre	98.45	492.00
17.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				
17.5.1	100 mm dia. R.C.C. pipe	5	metre	507.05	2535.00
17.5.2	150 mm dia. R.C.C. pipe	5	metre	556.45	2782.00
17.5.3	250 mm dia. R.C.C. pipe	5	metre	899.80	4499.00
17.5.4	300 mm dia. R.C.C. pipe	5	metre	994.30	4972.00
17.6	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
17.6.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :				
17.6.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	each	12770.55	12771.00
17.7	Extra for depth for manholes :				
17.7.1	Size 90x80 cm				
17.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	metre	8825.40	8825.00
17.7.2	Size 120x90 cm				
17.7.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	metre	10585.50	10586.00

17.8	Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size):				
17.8.1	With 20x20 mm square bar	5	each	670.20	3351.00
17.8.2	With 20 mm diameter round bar	5	each	621.95	3110.00
17.9	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :				
17.9.1	For pipes 100 to 250 mm diameter	5	each	810.45	4052.00
17.9.2	For pipes 250 to 300 mm diameter	5	each	922.40	4612.00
17.1	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately) :				
17.10.1	Rectangular manhole 90x80 cm with rectangular cover 600 x 450 mm of grade LD - 2.5	1	each	2625.50	2626.00
17.10.2	Rectangular manhole 120x90 cm with circular cover 500 mm dia of grade MD - 10	1	each	4168.05	4168.00
17.11	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
17.11.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	each	5957.90	11916.00
17.12	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) with precast R.C.C. vertical grating complete as per standard design :				
17.12.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	each	6889.80	13780.00

17.13	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design:				
17.13.1	Inside dimensions 455x610 mm and 45 cm deep for single pipe line :				
17.13.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	each	6937.90	13876.00
17.14	Extra for depth beyond 45 cm of brick masonry chamber :				
17.14.1	For 455x610 mm size				
17.14.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	metre	6117.00	6117.00
	Sub-Total				139279.00
18	ALUMINIUM WORK				
18.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
18.1.1	For fixed portion				
18.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	50	kg	495.05	24753.00
18.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	25	kg	530.90	13273.00

18.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
18.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	50	kg	598.60	29930.00
18.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	25	kg	634.45	15861.00
18.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
18.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	3	sqm	1139.30	3418.00
18.2.2	Pre-laminated particle board with decorative lamination on both sides	5	sqm	1115.40	5577.00
18.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
18.3.1	With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	5	sqm	1176.80	5884.00
18.3.2	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	5	sqm	1505.25	7526.00
18.3.3	With float glass panes of 8 mm thickness (weight not less than 20 kg/sqm)	5	sqm	1685.40	8427.00
18.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer- in-charge.				
18.4.1	With stainless steel cover plate minimum 1.25 mm thickness	5	each	2823.85	14119.00

18.5	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.				
18.5.1	Upto 5 mm depth and 5 mm width	10	metre	96.75	968.00
18.6	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections.				
18.6.1	For fixed portion	30	kg	12.80	384.00
18.6.2	For shutters of doors, windows & ventilators	30	kg	12.80	384.00
18.7	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
18.7.1	255 X 19 mm	5	each	387.00	1935.00
18.7.2	510 X 19 mm	5	each	802.40	4012.00
18.8	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.				
18.8.1	Anodized (AC 15) aluminium tubular handle bar	3	each	575.75	1727.00
18.9	Providing and fixing Brass 100 mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	5	each	528.85	2644.00
18.1	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.				
18.10.1	Anodized (AC 15) aluminium	5	each	89.40	447.00
18.11	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge				
18.11.1	Anodized (AC 15) aluminium	5	each	107.90	540.00
18.12	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	10	kg	638.35	6384.00

18.13	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately).	2	sqm	5325.90	10652.00
18.14	Filling the gap in between aluminium/ stone/ wood frame and adjacent RCC/Brick/ Stone/ wood/ Ceramic/ Gypsum work by providing weather/ structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete, complying to ASTM C920, DIN 18540-F & ISO 11600				
18.14.1	Upto 5 mm depth and 5 mm width	10	metre	148.10	1481.00
	Sub-Total				160326.00
19	WATER PROOFING				
19.1	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: (i) Ist course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS : 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. (ii) IInd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. (iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area. (iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	3	sqm	769.60	2309.00
19.2	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	5	sqm	617.05	3085.00

19.3	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. "All above operations to be done in order and as directed and specified by the Engineer-in-Charge":				
19.3.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	5	sqm	1684.60	8423.00
19.4	Grading roof for water proofing treatment with				
19.4.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	1	cum	8042.30	8042.00
19.5	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer- in-Charge.	50	sqm	563.10	28155.00

19.6	Providing and applying crystalline mortar by mixing in the ratio of 4.5 : 1 (4.5 parts crystalline mortar : 1 part water) for the treatment of faulty construction joints, cracks, tie rod holes and spalled & honeycombed surface of RCC underground structures like basement, water tanks, bridge deck etc. to ensure water tightness. The crystalline mortar shall conform to the EN 1504- 3 having compressive strength Class R4 \geq 45 MPa and adhesive bond strength Class R3 \geq 1.5 MPa. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.				
19.6.1	For sealing cracks and faulty construction joints, routed out/ making U-shape groove size 25x25 mm and then primed the area with integral crystalline slurry @0.05 kg/running metre and while the surface is tacky filled the groove upto surface with crystalline mortar @1.50 kg/running metre. Once crystalline mortar is touch dry then finally applied two coats of integral crystalline slurry @0.05 kg/running metre per coat.	2	metre	547.70	1095.00
	Sub-Total				51109.00
20	NEW TECHNOLOGIES AND MATERIALS				
20.1	Cleaning of reinforcement from rust from the reinforcing bars to give it a total rust free steel surface by using alkaline chemical rust remover of approved make with paint brush and removing loose particles after 24 hours of its application with wire brush and thoroughly washing with water and allowing it to dry, all complete as per direction of Engineer-In-Charge.				
20.1.1	Bars upto 12 mm diameter	5	metre	8.25	41.00
20.2	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer- In-charge complete in all respect.				
20.2.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	10	sqm	141.20	1412.00
20.2.2	Epoxy bonding adhesive having coverage 2.20 sqm/kg of approved make	10	sqm	285.20	2852.00

20.3	Providing, mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement: 4 graded coarse sand with polymer minimum 2% by wt. of cement used) as per specifications and directions of Engineer-in-charge. Note: Measurement and payment: The pre-measurement of thickness shall be done just after the surface preparation is completed and Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and/or the 75 mm size cube crushing strength at the end of 28 days to be not less than 30 N/Sqmm2).				
20.3.1	12 mm average thickness.	10	sqm	388.65	3887.00
20.3.2	25 mm average thickness in 2 layers.	10	sqm	587.35	5874.00
20.3.3	50 mm average thickness in 3 layers.	10	sqm	1174.70	11747.00
20.4	Providing, mixing and applying SBR polymer (of approved make @ minimum 2% by wt. of cement used) modified plain/reinforced cement concrete for structural members having minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] with specified average thickness. Note: Rates shall be for finished surface area of concrete and shall include the cost of labour, concrete and appropriate approved Super-Plasticiser for rendering concrete as flowable and SBR polymer but shall exclude cost of reinforcement, bond coat, Shear Keys, centering and shuttering, strutting, propping etc (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument)				
20.4.1	50 mm thick in Grade M25 with cement content not less than 330 kg per cum	5	sqm	569.15	2846.00
20.5	Providing, erecting, maintaining and removing temporary protective screens made out of specified fabric with all necessary fixing arrangement to ensure that it remains in position for the work duration as required by the Engineer-in-charge.				
20.5.1	Wooven PVC cloth	50	sqm	54.25	2713.00
20.6	Providing and fixing hard drawn steel wire fabric of size 75 x25 mm mesh or other suitable size wire mesh to be fixed & firmly anchored to the concrete surface by means of "L" shaped mild steel shear key welded with existing reinforcement including the cost of materials, labour, tool & plants as approved by Engineer-in-charge.	5	sqm	902.55	4513.00

20.7	Filling of joints between RCC plinth beam / floor slab and wall panel of external walls, toilet / bath room / wet areas walls on all floor and parapet wall over roof slab, stair case head room at the time of erection of GFRG panels with Grout RW/equivalent sealant compound after the erection of panel before the infill of concrete in panel cavities and fine finish. This applies for all horizontal and vertical joints between GFRG wall and slab panels.	30	metre	49.30	1479.00
	Sub-Total				37364.00
21	MISCELLANEOUS				
21.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources: 10 graded brick aggregate 40 mm nominal size derived from natural sources)	1	Cum	6279.25	6279.00
21.2	P/F C.P brass towel rod complete with two C.P.brass brackets fixed to wooden cleats with C.P. brass screws of approved quality size of 600 x 20 mm.	10	Each	739.77	7398.00
21.3	Providing & fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 15 mm nominal bore	5	Each	697.09	3485.00
21.4	Providing and fixing C.P. grating with or without hole for waste pipe for floor/ nahani trap 100 mm dia. weight not less than 100 grams.	10	Each	71.13	711.00
21.5	Providing and fixing C.P Brass shower rose 15 mm or 20 mm inlet with shower arm , 75 mm dia fancy type.	20	Each	782.45	15649.00
21.6	Providing and fixing C.P. waste 32 mm dia of make L&K for wash basin / sink.	5	Each	327.21	1636.00
21.7	Providing and fixing ISI marked flush door shutter non decorative type, core of block board construction with frame of first class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 35 mm thick including ISI marked M.S butt hinges with necessary screw complete."	3	Sqm	3086.95	9261.00
21.8	Providing and fixing white vitreous china oval type wash basin of size 550 x 480 with 15mm C.P brass pillar tap, 32mm C.P brass waste of standard pattern.	2	Each	5389.50	10779.00
21.9	Providing and fixing C.P soap dish etc. complete.	5	Each	625.87	3129.00
21.1	Providing and fixing C.P waste 40 mm nominal bore for china sink or wash basin (L&K) and approve equal make.	5	Each	654.11	3271.00

21.11	Providing and fixing C.P waste 50 mm nominal bore for china sink or wash basin (L&K) make.	2	Each	508.42	1017.00
21.12	Providing and fixing 15 mm nominal bore C.P brass two way bib cock of L&K or approved equivalent make etc. complete	6	Each	1813.86	10883.00
21.13	Repairing and servicing of sensor set for urinal Tosi Automats equivalent .	3	Each	602.00	1806.00
21.14	Cutting and rubbing and polishing on marble work/Granite work/stone work / musaic work where ever required i/c filling of joints with grout after cleaning and then gloss finish complete.	100	Sqm	100.00	10000.00
21.15	Providing and fixing c.p. brass Metro pole flush valve concealed body of (Jaguar make) code no1093 SQ 40 mm nominal bor	5	Each	3871.28	19356.00
21.16	Providing and fixing M S handle for steel window.	10	Each	183.46	1835.00
21.17	Providing and fixing c.p. connection for gyser 15x 450 mm with nut and washer.	5	Each	462.36	2312.00
21.18	Providing and fixing A.C.P.sheet.	5	Sqm	850.00	4250.00
21.19	P/F C.P Brass flange. (Heavy type)	10	Each	18.02	180.00
21.2	Providing and fixing AC sheet strips 75 mm wide 6 mm thick in CC flooring pavement etc. complete.	10	Meter	65.89	659.00
21.21	Providing and fixing white vitreous china flat back or half stal urinal of 580 x 380 x 350 with standard size C.P brass flush pipe, spreader with union and clamps and c.p brass push cock 15 mm i/c cutting and making good the walls. (a) Range of single half stal urinal.	6	Each	10332.30	61994.00
21.22	Providing and fixing C.P coat pin hanger of approved make with necessary screws gully etc.	5	Each	327.21	1636.00
21.23	Providing and fixing anti cocroach grating 125 mm dia of approved equivalent make.	5	Each	433.91	2170.00
21.24	Distemping with 1st quality acrylic distemper having VOC (Volatile Organic Compound) content less than 50 gram/ litre, of approved brand and manufacturer additional and coat wherever required to achieve even shade and colour. a) Old work	500	Sqm	66.05	33025.00
21.25	Providing and fixing aluminium door seal 3 feet long with screws etc of Beeta or approved equivalent make.	8	Each	213.40	1707.00
21.26	Providing and fixing C.P brass pipe 32 mm for bottle trap.	2	Each	213.24	426.00
21.27	Providing and fixing c.p. brass Urinal flush valve Auto closing System with Built-in Control cock & wall flange of (Jaguar make) code no PRS-077 15 mm nominal bor.	6	Each	3145.00	18870.00

21.28	Providing and fixing looking mirror of 5.5 mm thick superior glass of approved quality complete with 12 mm thick of water type ply wood sheet ground 40 mm wide 12 mm thick 1st class teak wood beading frame of half round fixed to wooden cleats with C.P brass screw and washer complete. teak wood beading finished with sprits polishing complete.	5	Sqm	4596.00	22980.00
21.29	Providing and fixing SS end cap for 25 mm dia curtain rod pipe as per approved make.	5	Each	85.45	427.00
21.3	Providing and fixing SS bracket heavy type with rawal plug and S.S screws etc complete.	5	Each	70.00	350.00
21.31	Providing and fixing 25 mm dia SS curtain pipe 202 grade heavy type .	5	Per metre	220.00	1100.00
21.32	Providing and fixing chicken mess in plaster.	5	Each	142.40	712.00
21.33	Providing and fixing Toughened glass in aluminium / Upvc door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): Toughened glass panes of 8 mm thickness.	2	Sqm	2707.15	5414.00
21.34	Dismantling broken wash basin /kitchen sink with old worn out bracket and cleaning of waste water pipe up to trap.	2	Each	45.00	90.00
21.35	Dismantling of C.I pipe with fittings and clamps i/c disposal of unserviceable material up to 50 mtr. lead and upto 150 mm dia. pipe.	10	Per Metre	20.00	200.00
21.36	Providing and fixing wall hung W.C with fitting code no.c8015.	2	Each	5732.00	11464.00
21.37	Providing and filling of 50 to 75 mm wacker rod and covering of silicon approved make in expansion joint Including cleaning of old joint etc complete .	1	Per metre	1509.75	1510.00
21.38	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (including the cost of chemical emulsion) : Treatment of soil under existing building wall inside & out side using chemical emulsion @ one litre per hole,600 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement: 2 Coarse sand) to match the existing floor: With Chlorpyrifos/Lindane E.C. 20% with 1% concentration As per approved brand	50	Sqm	161.50	8075.00

21.39	Providing and laying 70 mm thick factory made RCC grass grid paver block of M30 grade made by block making machine with strong vibratory compaction, of size 600mm X 400mm and of approved design, laid over and including 50 mm thick compacted bed of fine sand, filling the joint and holes with mix of 50% available Earth and 50% fine sand etc. all complete as per direction of Engineer-in-charge.	5	Sqm	1750.50	8753.00
21.4	Providing and fixing P.V.C door silencer with necessary screw etc. complete.	6	Each	47.00	282.00
21.41	Providing and fixing plain beading for doors and windows frame with screw plugs etc. complete.(a) II class teak wood 20 x 6 mm.	15	Metre	24.00	360.00
21.42	labour charges for installation / erecting submersible pump set.	2	Each	1800.00	3600.00
21.43	Supply of m.s. clamp 110 mm for submersible pump.	1	Each	323.30	323.00
21.44	Supply of single phase starter with panel board for submersible pump.	2	Each	2500.00	5000.00
21.45	Supply of Submersible pump 1.5 HP Crompton make .	1	Each	14146.00	14146.00
21.46	Providing and fixing vertical venetian blinds Vista make dust guard .	4	Sqm	1324.10	5296.00
21.47	Rewinding of 1.5 HP submersible pump including carriage.	1	Each	3746.20	3746.00
21.48	Groove cutting in dummy joints in cement concrete pavement / R.C.C floor size 7X 25 mm by groove cutting machine i/c cleaning , removal of all loose particle etc.	10	Metre	99.13	991.00
21.49	Providing and fixing Solenoid valve for urinal flushing sensor set Toshi make electricity operated.	2	Each	2700.00	5400.00
21.5	Repairing and servicing of sensor set for urinal (Tosi make /Automats) .	2	Each	602.00	1204.00
21.51	Providing and fixing sensor circuit for urinal including removal of old worn out sensor etc complete (Toshi make) electricity operated.	2	Each	3800.00	7600.00
21.52	Providing and fixing Auto urinal flusher battery operated sensor circuit with solenoid valve for urinal including removal of old worn out sensor etc complete Toshi make model no 419 S.	1	Each	7465.70	7466.00

21.53	Providing and fixing toughened glass in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With toughened glass panes of 8 mm thickness .	2	Sqm	2239.05	4478.00
21.54	Providing and fixing 125 mm wide P.O.P cornice.	15	Metre	165.30	2480.00
21.55	Providing and fixing C.P. pillar cock 15 mm nominal bore (L&K make) for wash basin.	5	Each	1052.75	5264.00
21.56	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand) with old available bricks	1	Cum	4148.55	4149.00
21.57	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources: 10 graded brick aggregate 40 mm nominal size derived from natural sources). With old available brick aggregate.	1	Cum	5411.95	5412.00
21.58	Brick on edge flooring with old available bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks: 1:6 (1cement : 6 coarse sand)	5	Sqm	634.40	3172.00
21.59	Half brick masonry with old available common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level. Cement mortar 1:4 (1 cement :4 coarse sand)"	3	Sqm	802.15	2406.00
21.6	P/F 1.50mm thick homogeneous polyvinyl chloride sheet/tile in flooring and skirting in approved pattern on a smooth and damp proof base using rubber base adhesive of approved quality and manufacturer like Dualpo S-758 , Fevicol SR 998 or equivalent including rolling with light wooden roller weight about 5 kg. All complete as directed by Engineer -in -charge in approved colour and shade.	10	Sqm	754.00	7540.00
21.61	Providing and fixing C.P basin mixer of 15 mm nominal bore (L&K) make etc. complete	1	Each	3343.19	3343.00
21.62	Providind and fixing C.P. hand spray (heath faucet) of approve make with push button control and flexible hose connection with C.P hook complete in all respects.	18	Each	889.15	16005.00

21.63	Providing and fixing 15 mm nominal bore C.P. swan neck pillar cock of L&K or approved equivalent make.	6	Each	1806.75	10841.00
21.64	Providing and fixing 15 mm nominal bore two way angle valve of make L&K or approved equivalent make.	6	Each	1714.28	10286.00
21.65	Carrying out /attending day to day maintenance complaints activities pertaining to different type of masonry works, carpentry works, plumbing works, welding works including all other works as and when required. This includes cleaning and garbage collected during attending the complaints and disposal of building rubbish, malba and garbage to specified disposal place complete. The T & P (essential worker tools related to works and aluminium ladder of multiple heights, necessary scaffolding,drilling, grinding, cutting & welding machines, safety gadgets etc.) and materials like washer jumper, nut & bolts, screws, glass putty, safeda, glue, adhesive etc. required to attend minor complaints will be supplied by the contractor without any extra cost. The activities as described are to be carried out in the most proper and professional manner and to the entire satisfaction of Incharge duly nominated by Hall office. (Total activities / work carried out in one complaint shall be treated as one job)	6000	Each	346.00	2076000.00
21.66	Supply of Materials: a. Preferred make list of the materials is enclosed as Annexure 'A' in Contract agreement. b. Quantity of each item given in BOQ is on yearly basis. c. The contractor has to supply the requirement of the material on monthly basis as per requirement as decided by Incharge duly appointed by Hall office and payment shall be made monthly basis on actual consumption of the material with due verification by Incharge, nominated by Hall office.				
21.66.1	PVC connection pipe 45 cm length 15 mm nominal bore	70	Each	57.00	3990.00
21.66.2	C.P. brass bib cock 15 mm nominal bore	10	Each	550.00	5500.00
21.66.3	C.P. brass long body bib cock 15 mm nominal bore	10	Each	604.00	6040.00
21.66.4	C.P. brass stop cock (concealed) 15 mm nominal bore	1	Each	720.00	720.00
21.66.5	C.P. brass angle valve 15mm nominal bore	12	Each	504.00	6048.00
21.66.6	C.P. Brass extension nipple (size 15mmx50mm)	12	Each	87.00	1044.00
21.66.7	Solid plastic seat with lid for pedestal type W.C. pan complete : White solid plastic seat with lid	18	Each	488.00	8784.00
21.66.8	White vitreous china pedestal type (European type/ wash down type) water closet pan.	3	Each	1631.00	4893.00
21.66.9	C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C.	10	Each	350.00	3500.00

21.66.10	P.V.C. low level flushing cistern with manually controlled device (handle lever) 10 litre capacity - White	10	Each	875.00	8750.00
21.66.11	CP Brass 32mm size Bottle Trap	10	Each	884.00	8840.00
21.66.12	P.V.C. waste pipe for sink or wash basin 32 mm dia	50	Each	41.00	2050.00
21.66.13	P.V.C. waste pipe for sink or wash basin 40 mm dia	1	Each	60.00	60.00
21.66.14	GM/brass Gate valve 15 mm	1	Each	807.00	807.00
21.66.15	GM/brass Gate valve 20 mm	5	Each	1136.00	5680.00
21.66.16	GM/brass Gate valve 25 mm	2	Each	1570.00	3140.00
21.66.17	Brass Ball Cock 15 mm	3	Each	450.00	1350.00
21.66.18	Brass Ball Cock 20 mm	3	Each	570.00	1710.00
21.66.19	Brass Ball Cock 25 mm	6	Each	925.00	5550.00
21.66.20	CP brass phase for pillar Cock 15 mm	38	Each	125.00	4750.00
21.66.21	Brass Rod for Ball Cock 15 mm	4	Each	67.00	268.00
21.66.22	CP revolving shower 15 × 75 mm	24	Each	365.00	8760.00
21.66.23	CP Grating 125 mm	15	Each	32.00	480.00
21.66.24	CP Hand shower with connection(Health Faucet)	35	Each	1110.00	38850.00
21.66.25	CP Jet Connection with Jet	10	Each	255.00	2550.00
21.66.26	CP Flange 15 mm	8	Each	25.00	200.00
21.66.27	CP Waste 32 mm Fullthread	4	Each	282.00	1128.00
21.66.28	CP swan neck pillar cock	6	Each	1160.00	6960.00
21.66.29	Al-Curtain Rod (Pipe), Medium duty, Dia 20 mm and 12 feet long	60	Each	295.00	17700.00
21.66.30	Al-Bracket 'L' Type, 20 mm dia	72	Each	26.00	1872.00
21.66.31	Al-Bracket 'T' Type, 20 mm dia	48	Each	22.00	1056.00
21.66.32	Al-Tower bolt 200 × 10 mm	3	Each	102.00	306.00
21.66.33	Al-Tower bolt 250 × 10 mm	3	Each	120.00	360.00
21.66.34	Al-Tower bolt 150 × 10 mm	18	Each	79.00	1422.00
21.66.35	Al- door handle 100 x10 mm	10	Each	72.00	720.00
21.66.36	Al- door handle 125 x10 mm	24	Each	105	2520.00
21.66.37	Al-Rubber door stopper (Double)	5	Each	73.00	365.00
21.66.38	Al-Hasp & Staple 115 mm	12	Each	61.00	732.00
21.66.39	Al-window SS friction stay 250 mm	6	Each	175.00	1050.00
21.66.40	Al-Sliding door bolt 250 × 16 mm	3	Each	272.00	816.00
21.66.41	C.P/Brass Towel Rail (600 X 20) mm	7	Each	750.00	5250.00
21.66.42	Hydraulic Door Closer aluminium extruded section body tubular type (IS:3564) for door weight upto 36 to 80 Kg and door width from 701 mm to 1000 mm.	3	Each	2480.00	7440.00
21.66.43	Aluminium casement window handles	10	Pairs	158.00	1580.00
21.66.44	Glass looking mirror 600 × 450 mm	6	Each	850.00	5100.00
21.66.45	Aluminium butt hinge 100x63x4mm	10	Each	110.00	1100.00
21.66.46	Aluminum weather strip door bottom seals with brush or rubber, size 36" L X 1.5" w	20	Each	72.00	1440.00
21.66.47	Iron Butt Hinge, 125 mm	6	Each	78.00	468.00
21.66.48	Iron Butt Hinge, 100 mm	6	Each	48.00	288.00
21.66.49	Iron Tower bolt 200 × 10 mm	4	Each	50.00	200.00
21.66.50	Iron Tower bolt 150 × 10 mm	17	Each	39.00	663.00
21.66.51	Iron door handle 125 mm	12	Each	13.00	156.00

21.66.52	Iron door handle 100 mm	12	Each	11.00	132.00
21.66.53	Coarse sand	5	Cum	1965.00	9825.00
21.66.54	Cement 50 K.g Bag	25	Bag	300.00	7500.00
21.66.55	Welding Rod	6	Pkt	370.00	2220.00
	Sub-Total				2716272.00
	Total				7801977.00
	Modified Estimated Cost after using correction factor on DSR 2023 on				7664663.00
	Say				7664663.00