

## Construction of Ground Floor of the Building for the new Government Dental College, Thrissur.

### Part 1 - Civil Works

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
<b>EARTH WORK</b>					
1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 150 m outside the periphery of the area cleared.	Sqm	12500.00		
2	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roo				
a	Beyond 30 cm girth upto and including 60 cm girth	each	30.00		
b	Beyond 60 cm girth upto and including 120 cm girth	each	20.00		
c	Beyond 120 cm girth upto and including 240 cm girth	each	10.00		
3	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 150m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
	<b>All kinds of soil</b>	Cum	5000.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
4	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 150 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed Ordinary rock	Cum	6750.00		
5	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 150 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed - 2nd depth 1.5m to 3.0m - ordinary rock	Cum	5250.00		
<b>FILLING IN SUBSTRUCTURE</b>					
6	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 etc complete, and form uniform level for flooring concrete .	Cum	6600.00		
7	Conveying from site and disposing off the excess earth as per the direction of engineer in charge.	Cum	10500.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	<b>CONCRETE WORK</b>				
8	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All works up to plinth level.				
	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)				
	Plinth Protection/ Flagging Concrete - All round Building (average depth)	Cum	55.00		
9	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size). (Below Flooring & Below Plint Beam)	Cum	700.00		
	<b>SUNKEN FILLING</b>				
10	Providing and laying cinder concrete in cement 1:15 (1 cement : 15 cinder of 12.5mm nominal gauge) on terraced roof or sunken slabs, laid to slope compacting, including cost of materials, labour, curing complete as per specifications.	Cum	46.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	<b>REINFORCED CEMENT CONCRETE</b>				
11	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using fly ash and cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering, finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.				
	NOTE- 1) Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately. 2) Fly ash conforming to grade I of IS 3812 (Part-1) only be used as part replacement of OPC as per IS 456. Uniform blending with cement to be ensured in accordance with clauses 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC. 3) The above item shall be used judiciously where specified quality of Fly Ash is available for mixing in concrete. Also, the guidelines issued by CDO, CPWD, vide circular no. CDO/SE(RR)/Fly Ash (Main)/102 dated 9th April 2009 shall be followed in such cases.				
a	<b>All work up to plinth level. (M25)</b>	Cum	1125.00		
b	<b>All work up to plinth level. (M30)</b>	Cum	95.00		
	Extra for proving richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.				
	Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
c	All work above plinth level up to floor V level (M25) concrete	Cum	995.00		
d	All work above plinth level up to floor V level (M30) concrete	Cum	175.00		
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.				
	Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).				
e	Add for using extra cement in the items of design mix over and above the specified cement content therein.				
(i)	<b>for M25</b>	Quintal	1570.00		
(ii)	<b>for M30</b>	Quintal	330.00		
12	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 : 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) <b>for dummy column</b>	cum	55.00		
	<b>FORM WORK</b>				
13	Centering and shuttering including strutting, propping etc., and removal of form for,				
a	Foundations, Footings, bases of columns, etc for mass concrete.	Sqm	2300.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
b	Walls any thickness including attached pilasters butteresses,Plinth and string courses etc.	Sqm	650.00		
c	Suspended floors,roofs,landings,Balconies and access platform	Sqm	3700.00		
d	Lintel,beams,plinth beams,girders,bressumers and cantilevers	Sqm	5300.00		
e	Columns and Pillars, Piers, Abutments, Posts and Struts.	Sqm	2050.00		
f	Stairs(excluding landings) except spiral-staircases.	Sqm	120.00		
g	Edges of slabs and breaks in floors and walls.	Rm	1450.00		
h	Weather shade, chajjas, corbels etc. including edges	Sqm	420.00		
14	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentring at all levels, over a height of 3.5m, for every additional height of 1 meter or part thereof (plan area to be measured)				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	Sqm	3700.00		
	<b>STEEL REINFORCEMENT</b>				
15	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete: Termo – Mechanically Treated Bars	Kgs	319000.00		
	<b>BRICK &amp; STONE WORK</b>				
16	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)	Cum	40.00		
17	Brick work with F.P.S bricks of class designation 7.5 in superstructure above plinth level up to floor v level in all shapes an sizes in:				
	Cement mortar 1: 6 (1 cement :6 coarse sand)	Cum	80.00		
18	Providing and fixing up to floor five level precast cement concrete solid block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering complete :				
	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	925.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
19	Half brick masonry with F.P.S brick of class designation 7.5 in superstructure above plinth level up to floor V level	Sqm	230.00		
20	Extra for providing and placing in position 2 Nos. 6mm dia M.S bars at every third course of half brick masonry (with FPS brick)	Sqm	230.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	<b>RANDOM RUBBLE MASONRY</b>				
21	Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) upto plinth level with:				
	Cement mortar 1:6 (1 cement : 6 coarse sand).	Cum	230.00		
	<b>WOOD AND ALUMINIUM WORK</b>				
22	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position.				
	Second class Teak wood	Cum	7.00		
23	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws excluding, panelling which will be paid for separately, all complete as per direction of Engineer-in-charge.				
	Second class teak wood 35mm thick shutter	Sqm	150.00		
24	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 :				
	Second class teak wood	Sqm	100.00		
25	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete:				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	125x85x5.5 mm (heavy type)	each	470.00		
26	Providing 40 x 5mm flat iron hold fast 40 cm long including fixing to frame with 10mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30 x 10 x 15 cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	Each	810.00		
27	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanized M.S. screws including drilling holes in masonry work/ CC/ R.C.C. and marking good etc.				
	50mm long	Each	810.00		
28	Providing and fixing fire resistance door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I sheet (Zinc coating not less than 120 gm/sqm) duly filled with vermiculite based concrete mix. Suitable for mounting 60 minutes fire rated door shutters. The frame is fitted with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistance primer etc. complete as per direction of Engineering -in -charge (Dash fastener to be paid for separately)	Rm	24.00		
29	Providing and fixing 50mm tk glazed fire resisting door shutter of 60 minutes fire rating conforming to IS:13614 (part-II) tested and certified as per laboratory approved by Engineering -in -charge with suitable mounting on door frame, consisting of vertical styles, lock rail, top rail 100mm wide, bottom rail 200 mm wide, made out of 16 SWG G>I sheet (Zinc coating not less than 120 gm/mm <sup>2</sup> ) dully filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistance primer etc. all complete as per direction of Engineering -in -charge (Paneling to be paid for separately)	Sqm	11.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
30	Providing and fixing glazing in fire resisting door shutter, fixing panels, and partitions etc. with G.I bearing of approved size made out of 20 SWG G.I sheet (Zinc coating not less than 120 gm/mm <sup>2</sup> ), fire resistant sealant, including applying a coat of approved fire resistant primer on G.I. bearing etc. complete all as per direction of Engineering-in-charge.				
	with clear fire resistant glass panes 6 mm tk of approved brand, having minimum 60 minutes fire resistance.	Sqm	11.00		
31	Providing and fixing panic bar/ latch (Double point) fitted with a single body, Trim latch & lock on brick side of the panic latch of reputed brand and manufacture to be approved by the Engineering-in-charge.all complete.	Sqm	4.00		
32	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
	250x10 mm	each	160.00		
33	Providing and fixing bright finished brass door latch with necessary screws etc. complete :				
	300x16x5 mm	Each	80.00		
34	Providing and fixing bright finished brass handles with screws etc. complete				
	125 mm	Each	80.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
35	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	Each	80.00		
36	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.	Each	65.00		
37	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Each	70.00		
38	Providing and fixing IS : 3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws etc., complete.	Each	16.00		
39	Providing and fixing factory made UPVC door frame made of UPVC extruded section having an overall dimensions as below ( tolerance $\pm 1$ mm ), with wall thickness 2.0mm ( $\pm 0.2$ mm), corners of the door frame to be joined with galvanized brackets and stainless steel screws, joints mitered and plastic welded. The hinged side vertical of the frames reinforced by galvanized M.S. tube of size 19x19 mm and 1mm ( $\pm 0.1$ mm) wall thickness and 3 nos. Stainless steel hinged fixed to the frame complete as per manufacturers Specification and direction of engineering -in-change				
	Extruded section profile size 48x40 mm	Rm	110.00		
40	Providing and fixing existing door frames:				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	24 mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24 mm and wall thickness 2 mm ( $\pm$ 0.2mm) with in built edging on both sides. The styles and rails mitered and joint at the corners by means of M.S. galvanized / plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanized M.S. tube of size 20x20 mm and 1mm ( $\pm$ 0.1mm) wall thickness. The lock rail made up of " H" section, a UPVC hollow section of size 100x24 mm and 2mm ( $\pm$ 0.2mm) wall thickness, fixed to the shutters styles by means of plastic/ galvanized M.S.'U' cleats. The shutter frame filled with a UPVC multi chambered single panel of size not less than 620mm, having over all thickness of 20mm and 1mm ( $\pm$ 0.1mm) wall thickness. The panes filled vertically and tie bar at two places by inserting horizontally 6mm galvanized M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer- in - charge.	Sqm	35.00		
<b>Aluminium Windows &amp; Ventilators</b>					
41	Providing and fixing aluminum work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate z sections and other sections of approved make confirming to IS : 733 and IS : 1285 fixed with fixed with raw plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC / neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and panelling to be paid for separately).				
	For fixed portion				
	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kgs	5850.00		
42	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 PVC / neoprene gasket required (fittings shall be paid for separately)				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kgs	2060.00		
43	Providing and fixing 12mm 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 aluminium 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.				
	Prelaminated particle board with decorative lamination on both sides.	Sqm	350.00		
44	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc., with PVC / 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 float glass panes of 5.5 mm thickness	Sqm	250.00		
45	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piect M.S. sheet outer box with side plate etc., complete as per the direction of Engineer-in-charge.				
	With stainless steel cover plate	Each	4.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
46	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. Upto 5mm depth and 5mm width	Rm	1330.00		
47	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & 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)	Sqm	8.00		
48	Providing and 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.	Each	4.00		
49	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 @ 200mm 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).	Kgs	300.00		
	<b>STEEL WORKS</b>				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
50	Providing and fixing stainless steel (Grade 304) railing made of hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolt 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 Engineering-in-charge .( for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc. )	Kgs	750.00		
51	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				
	Fixed to openings with rawl plugs screws etc.	Kgs	5300.00		
<b>FLOORING</b>					
52	Cement concrete flooring 1:2:4 (1 cement : 2 coarse and : 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				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	40mm thick with 20mm nominal size stone aggregate.	Sqm	50.00		
	<b>GRANITE STONE FLOORING</b>				
53	Providing and fixing 18mm 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 of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite work.				
	Area of slab over 0.50 sqm.	Sqm	860.00		
54	Extra for pre finished nosing to treads of steps of granite stone.	Rm	400.00		
55	Extra for making rough surface / 3 grooves to treads of steps of granite stone.	Rm	300.00		
56	Extra for Granite stone flooring in treads of steps and risers using single length up to 2.00 metre	Sqm	150.00		
57	Stone cladding work for wall lining upto 10m height with special adhesive over 12mm thick bed of cement mortar 1:3 (1cement : 3coarse sand) including pointing in white cement with an admixture of pigment to match the stone shade.				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	Granite stone 18mm thick of any colour and shade	Sqm	50.00		
58	Mirror polishing on marble work/Granite stone work where ever required to give high gloss finish complete.	Sqm	920.00		
59	Extra for providing edge moulding to 18mm thick granite stone counters. Vanities etc. item including machine polishing to edge to give high glass finish etc. complete as per design approved by Engineer-in - charge.	Rm	120.00		
60	Extra for providing opening of required size and shape for wash basins/kitchen sink in kitchen platform, vanity counters and similar location in granite stone work including necessary holes for pillar taps etc.including rubbing and polishing of cut edges etc.complete.	Each	30.00		
61	Providing and fixing stone slab 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.				
	Granite Stone of approved shade	Sqm	6.00		
62	Chequered precast cement concrete tiles 22mm thick in footpath ,Ramp & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand)				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	Dark shade using ordinary cement	Sqm	650.00		
<b>VITRIFIED FLOOR TILES</b>					
63	Providing and laying polished vitrified floor tile in different sizes (10mm thickness or nearest) with Acid and/ or Alkali resistant tiles and water absorptions less than 0.08% and confirming to IS: 15622 of make NITCO, ORIENT, SOMANY, KAJARIA, or equivalent as approved by the Engineer-in-charge in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement:4 Coarse sand) including grouting the joints with white cement and matching pigments etc. complete. (Basic Rate : Rs.880/m2)				
	Size of Tiles 60 x 60 cm	Sqm	2200.00		
64	Providing and laying Vitrified tiles in different sizes (10mm thickness or nearest) with water absorption less than 0.08% and conforming to IS: 15622, of make NITCO, ORIENT, SOMANY, KAJARIA, or equivalent as approved by the Engineer-in-charge in all colours & shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. (Basic Rate : Rs. 880/m2)				
	Size of Tiles 60 x 60 cm	Sqm	100.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
65	Providing and laying joint free Anti skid Glazed Ceramic floor tiles 300x300mm or more (7.5mm thickness or nearest) of 1 st quality conforming to IS: 15622 of make NITCO, ORIENT, SOMANY, KAJARIA, or equivalent as approved by the Engineer-in-charge in colours white, Ivory, Grey, Fume, Red Brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc.complete.	Sqm	170.00		
66	Providing and fixing 1st quality joint free ceramic glazed wall tiles 300 x 450mm size confirming to IS: 15622 (7.5mm thickness or nearest) of make NITCO, ORIENT, SOMANY, KAJARIA, or equivalent as approved by the Engineer-in-charge 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 12mm thick bed of cement Mortor 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.	Sqm	2050.00		
<b>POLYVINYL CHLORIDE SHEET FLOORING</b>					
67	Providing and fixing homogeneous antistatic Polyvinyl chloride sheet roll from fused jointed in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality and manufacturer like Dunlop S-758, Fevicol SR 998, Pidilite or equivalent as per IS 3462, BS 2050 & BS 3261 including rolling with light wooden roller weighing about 5 kg and having surface resistance in the range of 4x10 <sup>4</sup> Ω- 5x10 <sup>8</sup> Ω all complete as directed by Engineer-in-charge, in approved colour and shade.- Pidilite Roffler antistatic SL or equivalent. .2 mm Thick sheet	Sqm	45.00		
68	Providing and laying an Epoxy bases Antistaic flooring with the following operations. Preparing the surface of floor by etching, cleaning etc. Providing and applying one coat of epoxy primer Dr.Fixit pidipoxy EP of M/s pidilite Industries Ltd.. Providing and applying one coat of Rofflor Antistatic SL undercoat of M/S Pidilite or equivalent having surface resistance in the range of 3x10 <sup>3</sup> Ω - 9x10 <sup>6</sup> .Ω.Providing and laying with Rofflor Antisstatic SL conductive topcoat of M/S Pidilite or equivalent around 2mm thick, having surface resistance range of 5x10 <sup>4</sup> Ω-1x10 <sup>6</sup> Ω (0.05M Ω to 1 M Ω) as per the manufacturer etc complete	Sqm	52.00		
<b>ROOFING</b>					
<b>FALSE CEILING</b>					

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
69	<p>Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 gsm/sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet, spaced at 1200mm center to center and cross "T" of size 24x25mm made of 0.30mm thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600mm and size 24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, wherever, required, cutting/making,</p>				
	<p>opening for services like diffusers, 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 x1.6 x mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200mm 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 at all heights as per specifications drawings and as directed by Engineer-in-charge.</p>				
	<p>12.5mm thick square edge PVC Laminated Gypsum Tile of size 595x595mm, made of Gypsum plasterboard; manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16mm thick fire retardant PVC film on the face side and 12micron metalized polyester on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyester film so as to make the tile a completely sealed unit.</p>	Sqm	2000.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
70	Suspended walkable false ceiling with 75mm thick structural insulated sandwiched panels made with PUF insulation having density 40kg per cubic metre as core sandwiched between stainless steel sheet of thickness 0.6mm and grade SS 304-2B having 1200mm or suitable width with required length, consisting T'bar suspension type of frame work made with extruded aluminium perimeter channels and 3mm thick 1"x1"square tube extruded aluminium runners suspended with 6mm dia G.I. rods from existing RCC slab. Rate shall include necessary cutouts for air supply and luminaries complete with edge finishing. Silicon sealant shall be used at the joints. Ceiling system shall be suitable for loading upto 150kg/sq.m	sqm	50.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
<b>FINISHING</b>					
<b>Internal Plastering</b>					
71	15mm cement plaster on the rough side of single or half brick wall of mix : 1 : 4 (1 cement : 4 fine sand)	Sqm	7900.00		
<b>External Plastering</b>					
72	15mm cement plaster on the rough side of single or half brick wall of mix : 1 : 4 (1 cement : 4 fine sand)	Sqm	3250.00		
73	Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement : 20 mm cement plaster to top of slab and sunshade	Rm	4150.00		
<b>Ceiling Plastering</b>					
74	6 mm cement plaster of mix : 1:3 (1 cement: 3 fine sand) for ceiling plastering	Sqm	4700.00		
<b>WALL FINISHES</b>					
<b>INTERNAL</b>					
75	Wall painting with Plastic emulsion paint of approved brand and manufacture to give an even shade –Two or more coats on new work.	Sqm	10600.00		
76	Applying one coat of cement primer of approved brand and manufacture on wall surface – Cement Primer	Sqm	10600.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
77	French spirit polishing : Two or more coats on new works including a coat of wood filler.	Sqm	140.00		
78	Painting Steel work with Delux Multi surface paint to give an even shade.Two or more coat applied @ 0.90 ltr/10sqm over an over an under coat of primer applied @ 0.80ltr/10sqm of approved brand or manufacture.	Sqm	250.00		
79	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.	Sqm	10600.00		
<b>EXTERNAL</b>					
80	Finishing walls with Acrylic Smooth exterior paint of required shade :				
	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm).	Sqm	3250.00		
81	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.				
	On wall surface	Sqm	120.00		
<b>WATER PROOFING</b>					

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
82	<p>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.</p>	Sqm	170.00		
<b>EXPANSION JOINT</b>					
83	<p>Providing and fixing in position 12mm thick and 5cm depth bitumen impregnated fibre board conforming to IS: 1838 including cost of primer, sealing compound in expansion joints.</p>	Rm	400.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	<b>MISCELLANEOUS</b>				
	<b>STRUCTURAL GLAZING</b>				
84	Providing, fabricating and fixing Semi Unitized Structural glazing system using suitable extruded aluminium section for frames anodised to approved colour of 20 microns. Extruded section to be of aluminium alloy as per ISI 6062 (T5 or T6 with temper) conforming to ASTM B221 or approved equivalent standard. The frames works should have water tight joints and provision for rainwater drainage. MS brackets (hot dip Galvenised) or extruded aluminium section brackets to be fixed to building structure with 10 mm dia anchor fastener. The main aluminium frame to be fixed to bracket with suitable SS bolt/nut washer. The complete framework to be aligned and levelled as required. The reflective glass units are to be glued to separate glass panel frames (made out of suitable aluminium section) with specified /				
	approved structural silicon sealant of Dow Corning G.E silicone or approved manufacturer after proper curing & testing sealed manufacture each panel to be fixed to main frame individually with fasteners. After aligning the panel to correct line /levels the gaps between the glass panels to be sealed with weather sealant of approved make. The system should be designed to take horizontal and vertical movement upto 10mm for every floor and capable of withstanding wind pressure of 200 kpa all as per drawing. The system design should be generic to accommodate double glass or single glass as may be required and gasket based, designed with chamber for pressure equalization. Shop drawing submitted for approval shall show the full detail of fire stops/ smoke seal. The rate include detailed design calculation taking in consideration the wind load, adequate factor of safety as per relevant. I.S code / international code. The rate should included for if require panels (top hung) as indicated in drawing with SS heavy duty self balancing friction Hinges and multipoint handle cum lock Smoke seal/ fire stop around vision panel to be provide and suitably sealed. Suitable thermal insulation in Spondral panel to be provided if required. Frame work to be fabricated out of SG R series with Vertical and horizontal of size 130 x 55mm (2.3 kg/mt). Suitable for floor height upto 3.75M and horizontal spacing of 1.1 mt. Main frames to be assembled as per designed required and fixed to clamps with bolt/ nut and washer. The frame work thus fixed to be properly aligned and leveled to required grid work>the Glass panels as made described above is then fixed to main frame. The gaps between panels are properly sealed and work complete as per design specification				
	Aluminium main frame: vertical & Horizontal - 130 x 55 (2.3Kg/mt)				
	Glass panel frame; 42 x 38mm (0.73 kg/mt)				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
	Hermitically sealed Double glass unit overall 23mm thick made of 6mm thick heat strengthened colour coated low emission glass of saint Gobain or equivalent + 12mm air gap + 5mm thick clear annealed glass of saint Gobain or equivalent.	Sqm	230.00		
85	Providing and fixing of Aluminium composite panel of approved make and colour for wall cladding for straight Brick/ RCC/ stone walls & coloumns/ beams with necessary aluminium frame works at required level made out of 50x25x3mm C section or equalent. The panel should consist of 2.5 mm thermoplastic core of antitoxic LDPE sandwiched between 0.25 skins thick aluminium sheet making a total panel thickness of 3mm. The surfaces will be finished with PVDF based coating on topsides and service coating on reverse sides would be in polyester paint. The system shall be fixed using GI brackets, aluminium L cleats and stainless steel bolts and nuts complete with spring washer and cap nuts and all other necessary accessories, sealing shall be done using weather sealant of Dow Corning 789 with necessary rods etc., complete..	Sqm	300.00		

#### Internal Plumbing and Sanitation Works

86	Providing and fixing white vitreous china <b>Wall Mounted type water closet</b> (European type W.C.pan) with seat and lid, 3/6 litre low level white vitrous Dual Flushing cistern and C.P flush bend with fitting and C.I brackets, 40mm flush bend, overflow arrangement 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. Make:Hindware,Cera,Jaquar etc.,				
a)	WC pan with ISI marked white solid plastic seat and lid	each	2		
87	Providing and fixing water closet squatting pan ( <b>Indian type W.C. pan</b> ) with 100mm 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 :				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
a)	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests. Make:Hindware,Cera,Jaquar etc.,	each	8		
88	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				
a)	W.C. pan with ISI marked white solid plastic seat and lid	each	10		
89	Providing and fixing C.P. brass <b>bib cock</b> of approved quality conforming to IS:8931. Make:Hindware,Cera,Jaquar etc.,				
a)	15 mm nominal bore.	each	20		
90	Providing and fixing wash basin with CI / MS brackets, 15mm CP brass <b>Pillar taps</b> , 32mm CP brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required.				
a)	White Vitreous China <b>Wash basin</b> size 630 x 450mm with a single 15mm C.P brass pillar tap. Make:Hindware,Cera,Jaquar etc.,	each	30		
91	Providing and fixing Stainless Steel A ISI 304 (18/8) 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 :				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
a)	Kitchen sink without drain board`610x510 mm bowl depth 200 mm.	each	6		
92	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15 mm nominal bore	each	12		
93	Bottle trap 38mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 263gms.	each	36		
94	Providing and fixing CP <b>Waste coupling</b> for wash basin and sink of approved quality, colour and make.				
a)	Waste coupling 31mm of 79mm length and 62mm breadth, weighing not less than 45 gms. Make:Hindware,Jaquar etc.,	each	30		
b)	Waste coupling 38 mm of 83mm length and 77mm breadth, weighing not less than 60 gms. Make:Hindware,Jaquar etc.,	each	6		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
95	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors wherever required : Make:Hindware,Cera,Jaquar etc..,				
a)	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.	each	10		
96	Providing and fixing <b>PVC Waste pipe</b> for sink or wash basin including PVC waste fittings complete.				
	Semi rigid pipe 32mm dia	each	36.00		
97	Providing and fixing SS soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements. Weighing not less than 106 gms.	each	52		
98	Providing and fixing <b>Toilet paper holder</b> . Make:Hindware,Cera,Jaquar etc..,				
	C.P Brass	each	20		
99	Providing and fixing 600 x 450mm <b>bevelled edge mirror</b> of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	36		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
100	Providing and fixing SS towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.	each	52		
101	Providing and fixing C.P <b>brass Long body bib cock</b> of approved quality conforming to IS standards and weighing not less than 690gms. Make:Hindware,Cera,Jaquar etc.,				
a)	15mm nominal bore	each	32		
102	Providing and fixing C.P. brass <b>Stop cock</b> (concealed) of approved quality. Make:Hindware,Cera,Jaquar etc.,				
a)	15mm nominal bore	each	65		
103	Providing & fixing of CP <b>Health faucet</b> . Make:Hindware,Cera,Jaquar etc.,				
	CP angle stop cock with all flange.				
	PVC flexible tube				
	Hand operated spray unit (instand type).	Set	12		
104	Providing and fixing of <b>over head shower set</b> with shower flange 170 mm long, including shower head and shower arm conforming to I.S Specification of approved make as per directions including all lead and lift etc., complete.	each	20		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
105	Providing and fixing of CP brass 15 mm dia, <b>2 in 1 exposed wall mixer cum spout</b> for wall installation with lever control and necessary CP bend for shower connection, including cutting and making good the walls complete as per sample approved by the EIC.	each	20		
106	Providing and fixing <b>Chlorinated Polyvinyl Chloride (CPVC)</b> pipes, having thermal stability for Hot and Cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in caharge. Make:Supreme,Finolex,Prince etc.,				
<b>Internal Work - Exposed on wall</b>					
a)	20mm nominal outer dia.Pipes	Rm	50.00		
b)	25mm nominal outer dia.Pipes	Rm	100.00		
c)	32mm nominal outer dia.Pipes	Rm	50.00		
d)	40mm nominal outer dia.Pipes	Rm	50.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
e)	50mm nominal outer dia.Pipes	Rm	400.00		
f)	62.5mm nominal inner dia.Pipes	Rm	400.00		
g)	75mm nominal inner dia.Pipes	Rm	400.00		
107	Providing and fixing <b>Chlorinated Polyvinyl Chloride</b> (CPVC) pipes, having thermal stability for Hot and Cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes and 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 caharge. Make:Supreme,Finolex,Prince etc.,				
	<b>Concealed work including cutting chases and making good the wall etc.</b>				
a)	15mm nominal outer dia.Pipes	Rm	100.00		
b)	20mm nominal outer dia.Pipes	Rm	250.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
c)	25mm nominal outer dia.Pipes	Rm	200.00		
d)	32mm nominal outer dia.Pipes	Rm	150.00		
108	Providing and fixing <b>Ball Valve (brass)</b> of approved quality, High or low pressure, with plastic floats complete. Make:Lehry,Supreme,Finolex,Prince etc.,				
	20mm dia nominal bore	each	10		
109	Providing and fixing <b>Gun metal gate valve</b> with C.I. wheel of approved quality (screwed end). Make: Lehry,Supreme,Finolex,Prince etc.,				
a)	25 mm dia nominal bore	each	100		
b)	32 mm dia nominal bore	each	15		
c)	40 mm dia nominal bore	each	10		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
e)	65 mm dia nominal bore	each	5		
110	<b>Cutting holes</b> upto 15 x 15 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 20mm nominal size) including finishing complete.	each	30		
111	Providing and fixing <b>PVC</b> soil, waste, rain water and vent pipe to IS : 13592 of SWR quality including all fittings, like EG : Bends, Tees, Elbows, Collars, junction, inspection doors, cowls, offsets, access pipes, jointing with rubber ring / solvent cement by application of leak proof adhesive like FRP paste including cutting holes in walls and floors and making good. Make:Supreme,Finolex,Prince etc., waste pipe and rain water pipe				
a)	40mm dia (6kg / sq.cm)	Rm	45.00		
b)	50mm dia (6kg / sq.cm)	Rm	100.00		
c)	63mm dia (6kg / sq.cm)	Rm	15.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
d)	75mm dia (6kg / sq.cm)	Rm	500.00		
e)	110mm dia (6 kg / sq.cm)	Rm	100.00		
f)	160mm dia(4kg/sq.m)	Rm	200.00		
	Rain Water Pipe				
g)	110mm dia (6 kg / sq.cm)	Rm	25.00		
h	160mm dia (6 kg / sq.cm)	Rm	150.00		
112	Providing and fixing Vent Cowl				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
(a)	S.C.I. S&S, Slotted Cowl (Terminal Guard) 100 mm	each	4		
(b)	S.C.I. S&S, Slotted Cowl (Terminal Guard) 75 mm	each	2		
113	Providing and fixing to the Inlet mouth of rain water pipe S.S grating 150mm diameter and weighing not less than 440 grams.	each	30		
114	Providing and fixing to the Inlet mouth of rain water pipe S.S grating 110mm diameter and weighing not less than 440 grams.	each	5		
115	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50mm 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.				
a)	110 mm	each	20		
b)	150 mm	each	150		
116	Providing and fixing <b>PVC floor trap</b> self cleansing design with or without vent arm complete including cutting and making good the walls and floors. Make:Supreme,Finolex,Prince etc.,				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
a)	110mm dia inlet 110mm dia outlet	each	30		
b)	50mm dia inlet 75mm dia outlet	each	32		
117	Providing and fixing <b>CP grating</b> of 6mm thick with rim including setting in floor with white cement mortar and making good the floor (Chilli make)				
a)	125mm dia	each	62		
118	Providing and fixing gun metal non- return valve of approved quality (screwed end) : 65 mm nominal bore	each	5		
119	Constructing <b>Masonry Chamber 60x60x75</b> , inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for junction pit and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 grades stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design.	each	20		
120	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm 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 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :				

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
a	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	10		
121	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) :				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	10		
122	Extra for depth for manholes				
	Size 120x90 cm				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Rm	50		
123	Providing and fixing square – mouth <b>PVC. Gully trap</b> grade “A” complete with CI grating brick masonry chamber with water tight CI cover with frame of 300 x 300mm 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				
a)	150 x 100mm size P type with common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	20		
124	Providing and laying with the base concrete 1:3:6 with <b>UPVC</b> pipes 6.00 kgf/sq.cm working pressure <b>110mm outside diameter</b> , compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all material, labour charges. HOM of equipments and testing, excluding cost of fittings, complete as per specifications. (External Sewerage Line)	Rm	100.00		

Item no.	Item Description	Unit	Quantity	Rate Rs (figures & words)	Amount Rs
125	Providing and laying with the base concrete 1:3:6 with <b>UPVC</b> pipes 6.00 kgf/sq.cm working pressure <b>160mm outside diameter</b> , compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all material, labour charges. HOM of equipments and testing, excluding cost of fittings, complete as per specifications. (External Sewerage Line)	Rm	200.00		
126	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m 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 :				
	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	Rm	450.00		
127	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 :				
	250mm dia. R.C.C. pipe	Rm	200.00		
128	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 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	Ltrs	15000.00		
	<b>TOTAL PART I - CIVIL WORKS</b>				