

**CONSTRUCTION OF 1000 BEDDED HOSTEL (SATISH DHAWAN HALL)(PHASE-II)  
AT N.I.T. ROURKELA**

**ABSTRACT OF COST**

	<b>DESCRIPTION</b>	<b>D.S.R AMOUNT</b>	<b>NON-DSR AMOUNT</b>
1	1.1INTERNAL CIVIL PART-1	504396923.00	94488947.00
2	1.2 INTERNAL WATER SUPPLY AND SANITARY-PART-III	17672777.50	0.00
3	1.3 .INTERNAL ELECTRICAL-PART-III	11074048.00	8445651.00
4	1.4 FIRE FIGHTING-PART-1V	0.00	5792550.00
5	2.1Civil Work Including Road work- part - I	28452519.00	944850.00
6	2.2 External Water Supply and Sanitary Items--Part-II	12843247.00	2081001.00
7	2.3External Electrical -Part-III	302171.00	4288787.00
	<b>SUB TOTAL</b>	<b>574741685.50</b>	<b>116041786.00</b>
	<b>G.TOTAL</b>	<b>690783471.50</b>	

**PROJECT:1000 STUDENTS HOSTEL AT NIT,ROURKELA**

**SCHEDULE-A-INTERNAL**

**1.1 SCHEDULE - A -PART- I (CIVIL)**

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
		<b>SCHEDULE-A-INTERNAL</b>				
		<b>1.1 SCHEDULE - A PART- I (CIVIL)</b>				
		<b>Carriage of Material</b>				
1	1.1.2	Carriage of excavated earth including loading ,unloading and stacking as per the instruction of engineer incharge. upto 1 Km	8500.00	<b>Cum</b>	82.78	703630.00
		<b>EARTH WORK</b>				
2	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means over areas (exceeding 30cm in depth. 1.5 m in width aswell as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatlydressed.				
	2.6.1	All kinds of soil	18860.00	<b>Cum</b>	129.35	2439541.00
3	2.7	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means over areas (exceeding 30 cm in depth, 1.5 m in width aswell as 10 sqm on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatlydressed.				
	2.7.1	Ordinary rock	90.00	<b>Cum</b>	197.75	17797.50
	2.7.3	Hard rock (blasting prohibited)	90.00	<b>Cum</b>	490.10	44109.00
4	2.8	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 o fbottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.8.1	All kinds of soil.	90.00	<b>Cum</b>	130.80	11772.00
5	2.9	Excavation work by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5m in width or10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, with in a lead of 50 m.				
	2.9.1	Ordinary rock	90.00	<b>Cum</b>	212.00	19080.00
	2.9.3	Hard rock (blasting prohibited)	90.00	<b>Cum</b>	491.95	44275.50
6	2.24	Extra rates for quantities of work,excluded				
	2.24.1	in or under water and /or liquid mud,including pumping out water as required	90.00	<b>Cum</b>	42.40	3816.00
	2.24.2	in or under foul position ,including pumping out water as required	90.00	<b>Cum</b>	98.39	8855.10
7	2.25	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 upto 50 m and lift upto 1.5 m.	30354.00	<b>Cum</b>	83.80	2543665.20
8	2.26	Extra for every additional lift of 1.5 m or part there of in excavation /banking excavated or stacked materials.				

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
	2.26.1	All kinds of soil.	3828.80	Cum	34.60	132476.48
	2.26.2	Ordinary or hard rock.	15300.00	Cum	62.00	948600.00
9.00	2.37	Supply and stacking of Fly ash conforming to IRC- 58 at site including carriage, loading , unloading & stacking up to any lead (measured stacks will be reduced by 20% for payment).	100.00	Cum	110.75	11075.00
9.1	2.36	Deduct for disposed soil not levelled and neatly dressed (against Item No. 2.6,&2.7)	17482.00	Cum	25.35	-443168.70
		<b>Cement Concrete Work</b>				
10.1	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinthlevel :				
	4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	1254.70	Cum	4514.05	5663778.54
11.1	4.1.9	1:4:8 (1 Cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size).	1079.00	Cum	3331.25	3594418.75
12.1	4.10	Providing and laying damp-proof course 40 mm thick with cement concrete1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size).	614.00	Sqm	207.55	127435.70
13.1	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.				
		CC 1:2:4 concrete qty required 6.48 bags of cement per cum	166.00	50 Kg of cement	35.35	5868.10
14.1	4.17	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement:3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	811.00	Sqm	338.75	274726.25
		<b>Reinforcement Cement Concrete Work</b>				
15.1	5.3	Reinforced cement concrete work in beams, suspended floors, roof shaving slope up to 15° landings, balconies, shelves, chajjas, lintels,bands, plain window sills, staircases and spiral stair cases up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	45.00	Cum	5494.55	247254.75
16.1	5.5	Reinforced cement concrete work in arches, arch ribs, domes,vaults, shells, folded plate and roofs having slope more than 15° up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	45.00	Cum	5684.55	255804.75
17.1	5.12	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement, with 1:2:4 (1cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size).	126.00	Cum	5265.20	663415.20

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
18.1	5.13	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5 m clear span up to floor fivelevel, including the cost of required centering, shuttering but excluding the cost of reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size).	95.00	Cum	8720.30	828428.50
20	5.29	Providing and fixing sheet covering over expansion joints with iron screw as per design to match the colour / shade of wall treatment.				
	5.29.2.1	150mm wide.	750.00	meter	437.30	327975.00
21	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work,using cement content work,using cement concrete as per approved design mix,including pumping of concrete to site of laying but excluding the cost of centering,shuttering ,finishing reinforcement,including admixtures in recommended proportions as per IS:9103 to accelerate,retard setting of concrete,improve workability without impairing strength and durability as per derection of Engineer-in-charge.(Note:Cement content considered in this item is @ 330 kg/cum.Excess/less cement used as per design mix is payable/recoverable seperately)				
	5.33.1	All works up to Plinth level.	3534.00	Cum	5242.15	18525758.10
22	5.33.2	All works above plinth & up to floor V level.	5820.00	Cum	5781.50	33648330.00
23	5.35	Deduct for using less cement than the quantity as provided in the item of batch mix concrete/RMC as arrived as per mix design.	225.00	quintal	589.80	132705.00
24	5.37	Providing and laying in Position ready mixed M-25 grade concrete for reinforced cement concrete work ,using cement concrete as per approved design mix,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 and finishing reinforcement,including cost of admixers in recommended proportions as per IS:9103 to accelerate,retard setting of concrete,improve workability without impairing strength and durability as per derection of Engineer-in-charge.(Note:Cement content considered in this item is @ 330 kg/cum.Excess/less cement used as per design mix is payable/recoverable seperately)				
	5.37.1	All works up to Plinth level.	3649.00	Cum	5590.60	20400099.40
25	5.37.2	All works above plinth & up to floor V level.	5636.00	Cum	6130.00	34548680.00
26	5.1	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:				
	5.1.2	1:1.5:3 (1 cement,1.5 coarse sand,3 graded stone aggregate 20mm nominal size)	1724.00	Cum	5094.85	8783521.40
27	5.2	Reinforced Cement concrete work in walls (any thickness),including attached pilasters,buttresses,plinth and string courses,fillets,colums,pillars,piers,abutments,posts and struts				
	5.2.2	1:1.5:3 (1 cement,1.5 coarse sand,3 graded stone aggregate 20mm nominal size)	2715.00	Cum	5735.75	15572561.25

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
		<b>Centering / Shuttering</b>				
28	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
	5.9.1	Foundations, footings, bases of columns, etc. For mass concrete.	6765.00	Sqm	166.90	1129078.50
29	5.9.2	Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.	1970.00	Sqm	285.15	561745.50
30	5.9.4	Shelves (Cast in situ)	197.00	Sqm	311.20	61306.40
31	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	39816.00	Sqm	262.25	10441746.00
32	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts.	35187.00	Sqm	365.60	12864367.20
33	5.9.7	Stairs,(excluding landings) except spiral-staircases.	3863.30	Sqm	326.30	1260594.79
34	5.9.13	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards	105.00	Sqm	470.10	49360.50
35	5.9.14	Extra for shuttering in circular work (20% of respective centering and shuttering items).(against 5.9.6)	383.00	Sqm	73.12	28004.96
35.(a)	5.9.13	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards.	100.00	Sqm	470.10	47010.00
36	5.9.15	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bedplates, anchor blocks and the like	94.00	Sqm	166.90	15688.60
37	5.9.16	Edges of slabs and breaks in floors and walls.				
	5.9.16.1	Under 20 cm wide	8932.00	Rm	99.45	888287.80
38	5.9.19	Weather shade, Chajjas, corbels etc., including edges.	4160.00	Sqm	411.10	1710176.00
39	5.9.20	Suspended floors, roofs, landings, balconies and access platform. with water proof ply 12mm thick.	30846.00	Sqm	488.05	15054390.30
40	5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).				
	5.11.1	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	447.00	Sqm	121.65	54377.55
41	5.22	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete upto plinth level				
	5.22.6	Thermo-Mechanically Treated bars.	1467124.00	Kg	62.25	91328469.00
	5.22A	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete above plinth level..In all floors				
	5.22.6	Thermo-Mechanically Treated bars.	1499020.00	Kg	62.25	93313995.00
		<b>Brick work</b>				
42	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks ofclass designation 7.5 in foundation and plinth in:				
	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	130.00	Cum	3316.55	431151.50
43	6.4	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 inall shapes and sizes in :				

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
	6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	170.00	Cum	3876.15	658945.50
44	6.13	Half brick masonry with common burnt clay F.P.S. (non modular) brick of class designation 7.5 in superstructure above plinth level up to floor V level.				
	6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	210.00	Sqm	476.85	100138.50
45	6.15	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	4273.00	Sqm	63.30	270480.76
		<b>Marble work</b>				
46	8.2	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 to edges to give high gloss finish etc. complete at all levels.				
	8.2.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebrablack marble				
	8.2.1.1	Area of slab upto 0.50 sqm	397.00	Sqm	1894.75	752215.75
	8.2.2	Granite of any colour and shade				
	8.2.2.1	Area of slab upto 0.50 sqm.	398.00	Sqm	3041.15	1210368.88
47	8.3	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.				
	8.3.1	marble work	1857.00	Rm	105.70	196284.90
	8.3.2	Granite work	489.00	Rm	178.75	87408.75
48	8.5	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 tap etc. including moulding, rubbing and polishing of cut edges etc. complete.	198.00	Each	281.10	55657.80
49	8.6	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	90.00	Sqm	163.10	14679.00
50	8.10	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.				
	8.10.2	Granite Stone of approved shade.	64.00	Sqm	2942.05	188291.20
		<b>Joineries (wood work and PVC Work)</b>				
51	9.21	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 ::				
	9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	2819.00	Sqm	1578.30	4449227.70

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
52	9.22	Extra for Providing and fixing flush doors with decorative veneering instead of non decorative ISI marked flush door shutters conforming to IS: 2202(Part I)				
	9.22.1	On one side only	2819.00	Sqm	371.70	1047822.30
53	9.23	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 doorshutter to be measured).	2820.00	Sqm	325.20	917064.00
54	9.42	Providing and fixing 18 mm thick, 150 mm wide pelmet of flat pressed 3layer or graded wood particle board medium density grade I, IS : 3087marked, including top cover of 6 mm commercial ply wood conformingto IS: 303 BWR grade, nickel plated M.S. pipe 20 mm dia ( heavy type) curtain rod with nickel plated brackets, including fixing with 25x3 mmM.S. flat 10 cm long fixed to pelmet with hollock wood cleats of size100 mm x 40 mm x 40 mm on both inner side of pelmet and rawl plugs75 mm long etc. all complete.	3437.00	Per metre	298.45	1025772.65
55	9.48	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.				
	9.48.1	Fixed to steel windows by welding.	61626.00	Kg	90.75	5592559.50
56	9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarsesand : 6 graded stone aggregate 20mm nominal size).	1238.00	Each	96.75	119776.50
57	9.117	Providing and fixing factory made UPVC door frame made of UPVC extruded sections having an overall dimension as below (tolerance±1mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the doorframe 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 1mm (± 0.1mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-charge				
	9.117.2	Extruded section profile size 42x50 mm	1917.00	Rm	177.05	339404.85
58	9.118	Providing and fixing to existing door frames				
	9.118.2	30 mm thick factory made Polyvinyl Chloride (PVC) door shuttermade 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 1.0mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20mm and 1 mm (± 0.1 mm) wall thickness. The lock rail madeup of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter stylesby means of plastic/ galvanised M.S. 'U' cleats. The shutter. frame filled with a uPVC multi-chambered single panel of sizenot less than 620 mm, having over all thickness of 20 mm and1 mm (± 0.1 mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mmgalvanised M.S. rod and fastened with nuts and washers,complete as per manufacturer's specification and direction of Engineer-in-charge.	416.00	Sqm	2587.25	1076296.00

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
59	10.14	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike- plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge:				
	10.14.1.1	Fixing with adjustable lugs with split end tail to each jamb	7375.98	Rm	346.75	2557621.07
59(a)	10.28	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 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.)	200.00	Kg	558.00	111600.00
		<b>Flooring</b>				
60	11.4	52mm thick cement concrete flooring with concrete hardener topping, under layer 40mm thick cement concrete 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6mm nominal size ) by volume, hardening compound mixed @ 2 litre per 50 Kg of cement or as per manufacture's specifications. This includes cost of cement slurry , But excluding the cost of nosing of steps etc complete.	2105.00	Sqm	420.50	885150.40
61	11.6	Cement Plaster Skirting up to 30cm height ,with cement mortar 1:3(1 cement:3coarse sand), finished with a floating coat of neat cement.				
	11.6.1	18mm thick	227.00	Sqm	258.20	58611.40
62	11.13	Providing and fixing glass strips in joints of terrazo/cement concrete floors				
	11.13.1	40mm wide and 4mm thick	757.00	Rm	29.40	22255.80
63	11.26	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) :				
	11.26.1	25 mm Thick	16586.10	Sqm	945.70	15685474.77
64	11.27	Kota stone slabs 20mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	790.45	Sqm	954.10	754168.35
65	11.36	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.	1316.40	Sqm	724.25	953402.70



Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
66	11.37	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), including pointing the joints with white cement and matching pigment etc., complete.	80.40	Sqm	764.55	61469.82
67	11.41	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 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.				
	11.41.2	Size of Tile 600x600 mm	9000.00	Sqm	1337.10	12033900.00
68	11.43	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness.	80.00	Sqm	336.75	26940.00
69	11.46	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), including grouting the joint with white cement & matching pigments etc. complete.				
	11.46.2	Size of Tile 600x600 mm	8360.00	Sqm	1339.20	11195712.00
		<b>Roofing</b>				
70	12.22	Making khurras 45x45 cm with average minimum thickness of 5cm 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 x 1 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..	178.00	Each	148.75	26477.50
71	12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with sealing conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
	12.41.2	110 mm diameter	4644.00	Rm	206.90	960843.60
72	12.42	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.				
	12.42.5	Bend 87.5°				
	12.42.5.2	110 mm bend.	635.40	Each	156.95	99726.03
	12.42.6	Shoe (Plain)				
	12.42.6.2	110 mm Shoe.	319.20	Each	287.05	91626.36
73	12.43	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.				
	12.43.2	110 mm	2014.00	Each	144.60	291224.40

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
74	12.51	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, 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 topcoat 15-18 microns using self drilling/ self tapping screws complete :				
	12.51.6	Gutter (600 mm over all girth)	83.00	Rm	750.70	62308.10
		<b>Finishing</b>				
75	13.1	12 mm cement plaster of mix :				
	13.1.2	1:6 (1 cement : 6 fine sand) - for inside	60964.00	Sqm	112.50	6858450.00
76	13.2	15 mm cement plaster on the half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand)	66784.00	Sqm	130.20	8695276.80
77	13.21	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	90.00	Sqm	37.40	3366.00
78	13.22	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof. (First additional height)	11986.00	Sqm	28.85	345796.10
		(Second & Third additional height)	8834.00	Sqm	28.85	254860.90
79	13.26	Providing and applying birla wall care putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	93443.50	Sqm	83.80	7830565.30
80	13.28	12 mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) :				
	13.28.3	Raised Band				
		100mm width - Around Parapet	19068.50	Cm Per metre	2.85	54345.23
81	13.37	White washing with lime to give an even shade:				
	13.37.1	New work (three or more coats)	62805.00	Sqm	11.75	737958.75
82	13.81	Distemping with 1st quality acrylic distemper, 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.				
	13.81.2	Two coats	60599.00	Sqm	34.40	2084605.60
83	13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
	13.43.1	Water thinnable cement primer	1098.00	Sqm	27.55	30249.90
84	13.45	Finishing wall with textured exterior paint of required shade.				
	13.45.1	New work (Two or more coats applied @3.28 ltr/10sqm) over and including priming coat of exterior primer applied @2.20kg/10sqm.	65000.00	Sqm	117.70	7650500.00
85	13.46	Finishing walls with Acrylic smooth exterior paint of required shade:				
	13.46.1	New work (Two or more coats applied @1.67ltr/10sqm) over and including priming coat of exterior primer applied @2.20kg/10sqm.	65000.00	Sqm	67.50	4387500.00
		<b>Applying priming coat :</b>				

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
86	13.50.1	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	2901.98	Sqm	25.85	75016.30
87	13.50.4	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (secondcoat)	3592.00	Sqm	11.40	40948.80
88	13.82	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.				
	13.82.2	Two coats	45.00	Sqm	56.60	2547.00
89	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	13.61.1	Two or more coats on new work	4191.00	Sqm	53.85	225685.35
90	13.68	French spirit polishing :				
	13.68.1	Two or more coats on new works including a coat of wood filler.	90.00	Sqm	137.45	12370.50
91	13.76	Forming groove of uniform size from 12x12 mm and upto 25x15 mm in the top layer of washed stone grit plastered surface as per approved pattern, including providing and fixing aluminum channels of appropriate size and thickness (not less than 2 mm), nailed to the under layer with rust proof screws and nails and finishing the groove complete as per specifications and direction of the Engineer-in-Charge.	7500.00	Rm	72.15	541125.00
92	14.53	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade :				
	14.53.1	One or more coats on old work	6905.00	Sqm	39.30	271366.50
		<b>ALUMINIUM WORK</b>				
93	21.1	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, fixed with rawl 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, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and paneling to be paid for separately) :				
	21.1.1	For fixed portion				
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	15000.00	Kg	387.60	5814000.00
94	21.1.2	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)				
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	5000.00	Kg	436.35	2181750.00
95	21.3	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):				
	21.3.1	With float glass panes of 4.0 mm thickness	695.00	Sqm	725.35	504118.25
	21.3.2	With float glass panes of 5.50 mm thickness	695.00	Sqm	905.75	629496.25

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
	21.3.3	With float glass panes of 8 mm thickness	1000.00	Sqm	1227.80	1227800.00
96	21.8	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.				
	21.8.1	Upto 5mm depth and 5 mm width	2500.00	Rm	75.10	187750.00
97	21.12	Providing and Fixing aluminium tubular handle bar 32mm outer dia ,3.0mm thick and 2100mm long with SS screws etc.complete as per derrection of Engineer incharge.				
	21.12.1	Anodised (AC15)aluminium tubular handle bar.	20.00	Each	498.85	9977.00
98	21.18	Providing and fixing 12mm thick frameless toughened glass door shutter of approved brand and manufacture,including providing and fixing top and bottom pivot and spring type fixing arrangement and making necessary holes etc. for fixing required door fittings,all complete as per derrection of Engineer- in -charge.(Door handle,lock and stopper etc. to be paid seperately).	50.00	Sqm	4444.75	222237.50
		<b>Water Proofing</b>				
99	22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the likeconsisting of :(i)1st course of applying cement slurry @ 4.4 kg/sqm mixed withwater proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical andhorizontal surface. (ii)IInd course of 20 mm cement plaster 1:3 (1 cement : 3 coarsesand) mixed with water proofing compound in recommendedproportion including rounding off junction of vertical and horizontalsurface. (iii)IIIRD course of applying blown or residual bitumen applied hot at1.7 kg. per sqm of area. (iv)IVth course of 400 micron thick PVC sheet. (Overlaps at jointsof PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	4490.00	Sqm	399.60	1794202.19
100	22.7	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 300mm height including cleaning the surface before treatment.b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm 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				

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
		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 2.75kg/ 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 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 3mm 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 :				
	22.7.1	With average thickness of 120mm and minimum thickness at khurra as 65 mm.	10698.00	Sqm	786.70	8416116.60
		<b>Total Civil Cost DSR Items</b>				<b>504396923.00</b>
		<b>SCHEDULE-A-INTERNAL</b>			<b>(A)</b>	<b>504396923.00</b>
		<b>NON SCHEDULE ITEM PART- I (CIVIL)</b>				
1	NSR	Providing and applying of cementitious crystalline based water proofing for concrete rafts,wall,water tanks,concrete floors,Positive & Negative Sides of the Retaining Wall etc. with crystal T1/T2 system. The application to be done from - ve (negative) / +ve (positive)side on a wet open pore concrete surface with brush @ 0.8 Kg of crystal T2 as per manufacture specification. including making grooves of 10 x 15 mm size on the construction joints and treating with crystal T1:1 part of clear water as per manufactures specification etc. and as per direction of engineer - in -charges. The rate also includes the clearing of surface to be treated with air compressor wherever required.	770.00	Sqm	737.00	567490.00
1(a)	NSR-1 (a)	Supplying and filling in plinth with local sand under floors, including watering, ramming, consolidating and dressing complete.	1807.00	Cum	300.00	542100.00
2	NSR	Providing Filling the Expansion joint with joint sealing compound on polyurethane based or equivalent (Dr. Fixit Pidiseal/Hydrocreate/sika/CRYTON) including a backup material like Thermocole / Celatex board inside the groove of expansion joints. The width to depth ratio of sealant should be 2:1 mixing the base and curing paste thoroughly using a slow speed drill machine with a suitable paddle until homogeneous and filling the joints with a suitable means starting from one end taking care at no point air is entrapped. After the completion of the filling, using suitable tool ensuring the seal is finished with proper adhesion on the two side surfaces and etc. complete. 50mm thick Horizontal expansion joint.	250.00	R.M	1583.00	395750.00
3	NSR	Providing Filling the Expansion joint with joint sealing compound on polyurethane based or equivalent (Dr. Fixit Pidiseal/Hydrocreate/sika/CRYTON) including a backup material like Thermocole / Celatex board inside the groove of expansion joints. The width to depth ratio of sealant should be 2:1 mixing the base and curing paste thoroughly using a slow speed drill machine with a suitable paddle until homogeneous and filling the joints with a suitable means starting from one end taking care at no point air is entrapped. After the completion of the filling, using suitable tool ensuring the seal is finished with proper adhesion on the two side surfaces and etc. complete. 50mm thick Vertical expansion joint.	750.00	R.M	1583.00	1187250.00

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
4	NSR	Floor finish with ceramic tiles (Kajaria /Euro or equivalent) (300x300) 7mm thick, water absorptions less than 0.05% conforming to ISO 10545 part 3 and flexural strength not less than 46 N/mm <sup>2</sup> , in floors over cm 1:4 mix, 20mm thick and jointed in neat cement slurry and pointed in white or coloured cement.	3500.00	Sqm	914.00	3199000.00
5	NSR	Supplying and laying of Ceramic wall tiles (Kajaria / Bonzer /Euro or equivalent) of size 300mmx600mm and to a thickness of 10 mm in vertical surfaces for dadoing toilets with water absorptions less than 0.05% conforming to ISO 10545 part 3 and flexural strength not less than 46 N/mm <sup>2</sup> , over CM 1:3 mix 12mm thick and jointed in neat cement slurry, pointed in white or coloured cement	4500.00	Sqm	1238.00	5571000.00
6	NSR	Diluting and injecting chemical emulsion for PRE-CONSTRUCTIONAL ANTI-termite treatment and creating a continuous chemical barrier under and around the column pits, wall trenches, basement excavation, top surface of plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surroundings of pipes and conduits etc. complete as per specifications - chlorpyriphos emulsifiable concentrate 20 % with 1.0% concentration as per IS. 6313.	9838.00	Sqm	310.39	3053616.82
7	NSR	Brick work flyash cement brick of class designation 75 Above plinth level.Cement mortar 1:6 (1 cement: 6 coarse sand).	7840.01	Cum	3589.32	28140322.47
8	NSR	Half Brick work flyash cement. brick of class designation 75 in cement mortar 1:4 (1cement:4 sand) including scaffolding and curing etc complete as per specification. in superstructure above plinth level upto floor five level. cement mortar 1:4 (1 cement : 4 sand).	4138.01	Sqm	378.41	1565864.27
9	NSR	Supplying,fabricatiing & fixing of Staircase railing with 50mm dia & 3mm thick SS pipe (304 grade) bent to shape and alignment & welded with necessary legs / base plate including all necessary site welding, labour, material, transportation, grinding and polishing etc complete.	35000.00	Kg	906.00	31710000.00
10	NSR	Supplying and laying VC tiles (VelicraftTechnology) in flooring of approved size and shade of KAJARIA/EURO/ASIAN/JOHNSON or equivalent make at all heights laid over cement mortar 20mm thick of propotion 1:4(1 cement : 4 coarse sand) tile adhesive of requisitle thickness (Bal Endura/Laticreate/Fosroc). The joints shall be filled with cement slurry mixed with requiried pigment to match the colour of tile including cost includes all labour, material, Tool plants, curing etc., complete in all respect as per direction of Engineer.	1875.00	Sqm	1304.00	2445000.00
11	NSR	Suppling & fixing PVC corner beading for toilets as per standard specification.	100.00	Rm	136.00	13600.00
12		<b>Poly Carbonate Sheet Roofing</b>				

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
	NSR	Providing and fixing 10 mm thick Multi wall compact polycarbonate sheet for sky light in the roof including scaffolding arrangements,all labour for placing and fixing in position by using self tapping screws ,rubber beadings,silicon sealant,but excluding the cost of steel member as per design etc., complete	224.00	Sqm	3200.00	716800.00
13	NSR	Providing and fixing of acoustic wall paneling frames made of 50mm G.I floor channel (1.4kg/12') for top and bottom frames. 48mm GI channel (1.4kg/12') for C/C 600mm vertical frames. 25mm(16kg/cum) glass wool with tissue frames. 25mm(16kg/cum) glass wool with tissue paper for acoustic in fill. finally 600x1200x20mm(400kg/m3 density) fabric sound soak plane with fabric fixed on the G.I frame with help of H- spline.	620.00	Sqm	3392.00	2103040.00
14	NSR	Providing & fixing Chicken wire mesh of approved quality and manufacturer in between R.C.C and Brickwork as per direction and upto satisfaction of Engineer in charge	1500.00	Sqm	92.57	138855.00
15		<b>ACP</b>				
	NSR	Providing and fixing 4 mm thick aluminium composite panel (of approved colour / shade) for exterior wall cladding all levels and height, fixed in pre size of infill panel including structural sealant etc. with water tight and air-tight system either curved or straight in plan. Panel skins material 0.5 mm thick aluminium sheet (3003 - H16) core material natural polyethylene. The aluminium composite panel to be fixed with extruded aluminium basic frame or CRCA from roll formed sections made of galvanized steel colour coated / powder coated (Base steel as per relevant IS code quality, galvanized as per relevant IS code with zinc of 120 GM / Sq. Rm.) (approx. basic frame weight 6 kg/sqm) angle cleats, rivets, G.I. brackets all as approved using suitable hitli / fisher / anchor bolts on RCC/Structural works including necessary accessories complete in all respects as per shop drawings, specifications and as directed by engineer- in- charge	10.00	Sqm	4643.00	46430.00
		Item includes cost of Aluminium Frame, ACP Panel, Weather Sealant (White / Black colour), Gasket, Foam, Scaffolding, Fixtures all machineries and all taxes .The above work is to be carried out by a Specialized manufacturer approved by the engineer- in- charge. The cost includes all materials, labour, scaffolding charges, water & electricity charges etc., complete. <b>(For Exterior)</b>				
16	NSR	Providing and fixing Structural Glazing fabricated from roll formed sections made of galvanized steel colour coated / powder coated (Base steel as per relevant IS code quality, galvanized as per relevant IS code with zinc of 120 GM / Sq. Rm.) with total coated thickness of 0.8mm for verticals and with total coated thickness of 0.6mm for horizontals. The glass holding section made of 304 grade stainless steel of 0.6mm thick. G.L Sections are to be used as stiffeners inside the CCS/PC section as per the design requirement. Design calculations are to be made to suit wind pressures as given as relevant IS code. The cost includes all materials such as paint, GI colour coated / powder coated sections, accessories, silicon, 6mm thick toughened reflective glass, labour, scaffolding charges, water & electricity charges etc., complete and as directed by Engineer-in-charge.	2000.00	Sqm	4733.00	9466000.00
17		<b>Anti static Flooring</b>				

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
	NSR	Including first coat (Anti static) AS45 mix uniformly with special roller brushes including laying the copper strips of 25mm wide self adhesive copper tape with conductive adhesive in required grid pattern & connect to earth socket, over which apply second coat of (Anti static) AS45 mix uniformly with special roller brushes and top layer 2mm thick self leveling epoxy (Anti-static) to uniform level using nylon spike roller etc., all as per manufacture's specifications including cost of all materials, labor charges, tools required to complete etc., and as directed by Engineer-in-charge.	117.00	Sqm	1685.00	197145.00
18	NSR	Providing and fixing in true horizontal level Armstrong or equivalent <b>OPTRA</b> Pebble microlook edge ceiling tiles with glass fiber substrate of size 600mmx600mmx15mm having NRC 0.90, Light reflectance of >88% (WT), thermal conductivity k = 0.040 W/m0K, Humidity Resistance of 95% RH, and having Fire Performance CLASS 1 (BS 476). The tile shall have a front facing of white scraped tissue of 180 gsm and 45 gsm formaldehyde free fiber tissue backing and shall be laid on Armstrong grid systems with 15mm wide T - section flanges colour white having rotary stitching on the Main Runner, 1200 mm & 600 mm Cross Tees.	1000.00	Sqm	1769.00	1769000.00
19	NSR	Providing rain water border in CM 1:2 of size 25mmx25mm over the plastered surface as per approved pattern.finished well with neat sharp edges by using required cement at all levels and locations,including preparing surfaces,scaffolding, curing and as per drawings, specificationd and as ditectd by Engineer-in-charge.	2667.00	Rm	64.00	170688.00
20	NSR	Providing and fixing SS Handle 100mm Size	1083.00	Nos	231.00	250173.00
21	NSR	Providing and fixing SS Aldrop of 14x300 mm size.	1083.00	Nos	439.00	475437.00
22	NSR	Providing and fixing SS tower bolt 150mm Size	66.00	Nos	147.00	9702.00
23	NSR	Providing and fixing SS tower bolt 300mm Size	1083.00	Nos	401.00	434283.00
24	NSR	Providing and fixing SS hanging type door stopper.	1068.00	Nos	300.00	320400.00
		<b>TOTAL (NON SCHEDULED ITEM)</b>			<b>(B)</b>	<b>94488947.00</b>
		<b>COST SUMMARY OF CIVIL WORKS</b>				
		<b>TOTAL (SCHEDULED ITEM)</b>			<b>(A)</b>	<b>504396923.00</b>
		<b>TOTAL (NON SCHEDULED ITEM)</b>			<b>(B)</b>	<b>94488947.00</b>
		<b>GRAND TOTAL (SCHEDULED + NON SCHEDULED ITEM )</b>				<b>598885870.00</b>
		<b>TOTAL OF SCH-'A' PART-(I) C/O TO GENERAL SUMMARY</b>				<b>598885870.00</b>
		<b>TOTAL OF SCH-'A' PART - I C/O TO GENERAL SUMMARY</b>				<b>598885870.00</b>



**PROJECT:1000 STUDENTS HOSTEL AT NIT,ROURKELA**

**1.2 SCHEDULE-'A' PART - II ) PLUMBING WORKS**

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
<b>1.2 SCHEDULE-'A' PART - II PLUMBING WORKS</b>						
<b>SANITARY FIXTURES</b>						
1	17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern 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 :				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	161.00	Each	2964.10	477220.10
2	17.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & 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				
	17.3.1	W.C. pan with ISI marked white solid plastic seat and lid	57.00	Each	4220.80	240585.60
3	17.5	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				
	17.5.4.	Range of four half stall urinals with 10 litre P.V.C. automatic flushing cistern.	156.00	Each	13541.25	2112435.00
4	17.7	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 :				
	17.7.5	White Vitreous China Angle back wash basin size 600x480 mm with single 15 mm C.P. brass pillar tap.	179.00	Each	1518.60	271829.40
5	17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	97.00	Each	894.70	86785.90
6	17.10	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 :				
	17.10.3	Kitchen sink without drain board 510x1040 mm bowl depth 200 mm	3.00	Each	5640.10	16920.30
7	17.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm or 340x410x265 mm sizes respectively.	181.00	Each	792.60	143460.60
8	17.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :				
	17.25.2	Flat back wash basin of size 550x400 mm	181.00	Each	725.15	131252.15

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
9	17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	17.28.1	Semi Rigid Pipe				
	17.28.1.2	40mm Dia	180.00	Each	66.45	11961.00
10	17.29	Providing and fixing 100 mm Centrifugally cast spun Iron grating for gully trap.	329.00	Each	24.60	8093.40
11	17.32	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 :				
	17.32.4	Rectangular shape 1500x450 mm	69.00	Each	1211.00	83559.00
12	17.33	Providing and fixing 600x120x5mm glass shelf with edges round of 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.	190.00	Each	341.25	64837.50
13	17.34	Providing and fixing toilet paper holder :				
	17.34.2	Vitreous china	161.00	Each	259.75	41819.75
14	17.70.	Providing and fixing PTMT Bottle Trap for Wash basin and sink				
	17.70.1	Bottle trap 31mm 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 260gms	425.00	Each	403.30	171402.50
15	17.71	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour. weighing not less than 105 gms	319.00	Each	180.10	57451.90
16	17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.				
	17.73.2.	600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.	249.00	Each	415.20	103384.80
17	17.74	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour. Weighing not less than 300 gms.	193.00	Each	452.35	87303.55
		<b>SOIL, WASTE, VENT &amp; RAIN WATER PIPES</b>				
18	17.35	Providing and fixing soil, waste and vent pipes :				
	17.35.1	100 mm dia.				
	17.35.1.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.	1860.00	Per metre	857.30	1594578.00
	17.35.2.	75 mm dia.				
	17.35.2.2.	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.	2520.00	Per metre	744.50	1876140.00
19	17.37	Providing and fixing M.S. holder-bat clamps of approved design to Centrifugally cast spun iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :				
	17.37.1	For 100 mm dia. Pipe	840.00	Each	112.50	94500.00
	17.37.2.	For 75 mm dia	460.00	Each	110.15	50669.00
20	17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
	17.38.1	100 mm				
	17.38.1.2	Centrifugally cast spun iron S&S as per IS - 3989	303.00	Each	353.25	107034.75
	17.38.2.	75 mm dia				
	17.38.2.2.	Centrifugally cast spun iron S&S as per IS- 3989	303.00	Each	281.15	85188.45
21	17.39	Providing and fixing plain bend of required degree.				
	17.39.1	100 mm				
	17.39.1.2	Centrifugally cast spun iron S&S as per IS : 3989	303.00	Each	296.35	89794.05
	17.39.2.	75 mm				
	17.39.2.2	Centrifugally cast spun iron S&S as per IS - 3989	303.00	Each	221.95	67250.85

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
22	17.40	Providing and fixing heel rest sanitary bend				
	17.40.1	100 mm dia				
	17.40.1.2	Centrifugally cast spun iron S&S as per IS - 3989	287.00	Each	342.80	98383.60
	17.40.2	75 mm				
	17.40.2.2	Centrifugally cast spun iron S&S as per IS - 3989	287.00	Each	297.45	85368.15
23	17.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
	17.43.1	100x100x100 mm				
	17.43.1.2	Centrifugally cast spun iron S&S as per IS - 3989	293.00	Each	579.75	169866.75
	17.43.2	75X75X75 mm				
	17.43.2.2	Centrifugally cast spun iron S&S as per IS - 3989	293.00	Each	438.00	128334.00
24	17.44	Providing and fixing single equal plain junction of required degree :				
	17.44.1	100x100x100 mm				
	17.44.1.2	Centrifugally cast spun iron S&S as per IS - 3989	293.00	Each	522.85	153195.05
	17.44.2.	75X75X75 mm				
	17.44.2.2	Centrifugally cast spun iron S&S as per IS - 3989	293.00	Each	378.75	110973.75
25	17.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete :				
	17.55.1	100 mm				
	17.55.1.2	Centrifugally cast spun iron S&S as per IS - 3989	293.00	Each	469.40	137534.20
	17.55.2	75 mm				
	17.55.2.2	Centrifugally cast spun iron S&S as per IS - 3989	293.00	Each	333.45	97700.85
26	17.56	Providing and fixing terminal guard:				
	17.56.1	100 mm				
	17.56.1.2	Centrifugally cast spun iron S&S as per IS - 3989	100.00	Each	244.10	24410.00
	17.56.2	75 mm				
	17.56.2.2	Centrifugally cast spun iron S&S as per IS - 3989	28.00	Each	221.95	6214.60
27	17.57	Providing and fixing collar:				
	17.57.1	100 mm				
	17.57.1.2	Centrifugally cast spun iron S&S as per IS - 3989	1125.00	Each	238.25	268031.25
	17.57.2.	75 mm				
	17.57.2.2.	Centrifugally cast spun iron S&S as per IS- 3989	1616.00	Each	169.65	274154.40
28	17.58	Providing lead caulked joints to centrifugally cast (spun) iron pipes and fittings of diameter:				
	17.58.1	100 mm	1688.00	Each	207.85	350850.80
	17.58.2	75 mm	2104.00	Each	176.50	371356.00
29	17.59	Providing and fixing M.S. stays and clamps for centrifugally cast (spun) iron pipes of diameter :				
	17.59.1	100 mm	794.00	Each	61.70	48989.80
	17.59.2.	75 mm	794.00	Each	52.35	41565.90
30	17.60.	Providing and fixing trap of self cleansing design with screwed down orhinged grating with or without vent arm complete, including cost ofcutting and making good the walls and floors :				
	17,60.1.	100 mm inlet and 100 mm outlet				
	17.60.1.1.	Sand cast iron S&S as per IS: 3989	690.00	Each	801.70	553173.00
31	17.61	Cutting chases in brick masonry walls for following diameter 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) :				
	17.61.1	100 mm dia.	320.00	Per metre	252.10	80672.00
	17.61.2	75 mm dia.	152.00	Per metre	180.40	27420.80
32	17.65	Painting Centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :				
	17.65.1	100 mm diameter pipe	1740.00	Per metre	28.75	50025.00
	17.65.2	75mm diameter pipe	2520.00	Per metre	22.00	55440.00

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
33	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with 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.				
	18.8.1	15 mm nominal outer dia Pipes	810.00	Rm	218.65	177106.50
	18.8.2	20 mm nominal outer dia Pipes	810.00	Rm	243.05	196870.50
	18.8.3	25 mm nominal outer dia Pipes	1170.00	Rm	297.95	348601.50
	18.8.4	32 mm nominal outer dia Pipes	1940.00	Rm	358.90	696266.00
		<b>Water Supply</b>				
34	18.10	Providing and fixing G.I. pipes (Medium class) complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work				
	18.10.1	15 mm dia. nominal bore	1160.00	Rm	161.60	187456.00
	18.10.2	20 mm dia. nominal bore	940.00	Rm	188.05	176767.00
	18.10.3	25 mm dia. nominal bore	1780.00	Rm	243.15	432807.00
	18.10.4	32 mm dia. nominal bore	3340.00	Rm	296.50	990310.00
	18.10.5	40 mm dia. nominal bore	1100.00	Rm	364.10	400510.00
	18.10.6	50 mm dia. nominal bore	780.00	Rm	453.65	353847.00
35	18.11	Concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall				
	18.11.1	15 mm dia nominal bore	1160.00	Rm	229.10	265756.00
	18.11.2	20 mm dia nominal bore	940.00	Rm	251.30	236222.00
36	18.12.	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.				
	18.12.7	65 mm dia. nominal bore	910.00	Rm	453.55	412730.50
37	18.13	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 :				
	18.13.1	25 to 40 mm nominal bore	464.00	Each	277.35	128690.40
38	18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	18.17.1	25 mm nominal bore	66.00	Each	372.95	24614.70
	18.17.2	32 mm nominal bore.	164.00	Each	450.90	73947.60
	18.17.3	40 mm nominal bore	64.00	Each	546.05	34947.20
	18.17.4	50 mm nominal bore	64.00	Each	780.60	49958.40
39	18.18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
	18.18.3	25 mm nominal bore	58.00	Each	421.65	24455.70
40	18.20	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :				
	18.20.1	15 mm nominal bore	548.00	Each	203.30	111408.40
41	18.21	Providing and fixing uplasticised PVC connection pipe with brass unions :				
	18.21.1	<b>300mm length</b>				
	18.21.1.1	15 mm nominal bore	1160.00	Each	51.35	59566.00
	18.21.1.2	20 mm nominal bore	920.00	Each	59.50	54740.00

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
42	18.38.	Painting G.I. pipes and fittings with synthetic enamel white paint over ready mixed priming coat, both of approved quality for new work				
	18.38.1	15 mm diameter pipe	1160.00	Rm	7.35	8526.00
	18.38.2	20 mm diameter pipe	870.00	Rm	8.65	7525.50
	18.38.3	25 mm diameter pipe	1420.00	Rm	11.40	16188.00
	18.38.4	32 mm diameter pipe	3280.00	Rm	13.45	44116.00
	18.38.5	40 mm diameter pipe	960.00	Rm	16.00	15360.00
	18.38.6	50 mm diameter pipe	880.00	Rm	18.80	16544.00
43	18.48	Providing and placing on terrace (at all floor levels) polyethylenewater 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	69000.00	Per litre	6.10	420900.00
44	18.54	Providing and fixing PTMT bib cock of approved quality and colour.				
	18.54.1	15mm nominal bore, 86 mm long. Weighing not less than 88 gms.	191.00	Each	130.10	24849.10
	18.54.3	15 mm nominal bore, 165mm long. Weighing not less than 110 gms.	179.00	Each	199.80	35764.20
45	18.55	Providing and fixing PTMT stop cock of approved quality and colour.				
	18.55.3	Concealed stop cock, 15mm nominal bore, 108mm long. Weighing not less than 108 gms.	362.00	Each	214.90	77793.80
46	18.56	Providing and fixing PTMT pillar cock of approved quality and colour .				
	18.56.1	15mm nominal bore, 107mm long. Weighing not less than 110 gms.	191.00	Each	202.25	38629.75
47	18.57	Providing and fixing PTMT, push cock of approved quality and colour.				
	18.57.2	15 mm nominal bore, 80mm long. Weighing not less than 46 gms.	177.00	Each	106.85	18912.45
48	18.58	Providing and fixing PTMT grating of approved quality and colour.				
	18.58.1	Circular type.				
	18.58.1.2	125 mm nominal dia with 25 mm waste hole.	620.00	Each	50.15	31093.00
49	18.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball.				
	18.62.3	25 mm nominal bore, 152mm long. Weighing not less than 440 gms.	91.00	Each	543.65	49472.15
50	18.64	Providing and fixing PTMT swivelling shower, 15 mm nominal bore, weighing not less than 40 gms	87.00	Each	112.75	9809.25
51	18.74	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts collar and bush of approved quality and colour.				
	18.74.1	15 mm nominal bore with 30cm length.	1124.00	Each	59.50	66878.00

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
52	18.76	Cutting holes up to 30x30 cm in walls including making good the same:				
	18.76.1	With F.P.S. bricks	651.00	Each	152.00	98952.00
53	18.77	Cutting holes up to 15x15cm 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.	311.00	Each	143.95	44768.45
		<b>Total for DSR Items(Sanitary&amp;Water Supply)</b>				<b>17672777.50</b>
		<b>Total for DSR Items(Sanitary&amp;Water Supply)</b>			<b>(A)</b>	<b>17672777.50</b>
		<b>TOTAL FOR NSR ITEMS</b>			<b>(B)</b>	<b>0.00</b>
		<b>TOTAL FOR DSR ITEMS</b>			<b>(A)</b>	<b>17672777.50</b>
		<b>GRAND TOTAL (SCHEDULED + NON SCHEDULED ITEM )</b>				<b>17672777.50</b>
		<b>TOTAL OF SCH-'A' PART-(II) C/O TO GENERAL SUMMARY</b>				<b>17672777.50</b>

**PROJECT:1000 STUDENTS HOSTEL AT NIT,ROURKELA**

**PART-IV (FIRE FIGHTING)-SCHEDULE-A**

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
<b>Non Schedule Items -PART-IV (FIRE FIGHTING)</b>						
<b>FIRE EXTINGUISHERS</b>						
1	NSR	Supplying Portable <b>Fire Extinguisher, Carbon-dioxide</b> type flat base including valves, discharge hose of not less than 10mm dia.1m long& complete in all respects including fill with CO2 gas conforming to IS:15683 filled ratio of not more than 0.667 of not more than 0667 and wall suspension bracket				
		Water Co2 Type 9.Lt Capacity (IS:15683)	1078.00	<b>Each</b>	2460.00	2651880.00
2	NSR	Providing and fixing of <b>fire buckets</b> (round bottom) -9 litres capacity, initially filled with sand, painted by white inside and red outside with letters "FIRE" in black etc. complete.	105.00	<b>Each</b>	400.00	42000.00
		<b>Sub Total</b>			<b>Sub Total</b>	<b>2693880.00</b>
<b>HOSE REEL</b>						
3	NSR	Supply, fixing, testing & commissioning of 20 mm bore and 30 meter long hose (rubber lined pipe as per IS:444) and <b>hose reel</b> for first aid fire fighting conforming to Is: 884, with 180° full swing drum, fixing brackets, 5 mm dia. Shut off gun metal nozzle, 32 mm dia . hand lever operated ball valve, connecting directly from the riser through 32 mm dia. G.I. pipe with sockets, elbows, nipples, Gate Valve, etc. including providing operating instructions on a metal plate and fixing it near hose reel. The system shall be complete in all respects as per specifications in the drawings and directions of Engineer-in-charge.	91.00	<b>Each</b>	8000.00	728000.00
4	NSR	Providing gun metal ISI marked 63 mm. dia. Instantaneous pattern short <b>branch pipes</b> & 16 mm dia. Nozzle suitable for interconnections to hose pipe coupling as required.	91.00	<b>Each</b>	1485.00	135135.00
5	NSR	Providing ISI marked RRL(IS:636 type-II) <b>fire hose pipe</b> 15 meter long and 63 mm dia with ISI marked (IS:903) gun metal male and female coupling bound and riveted to hose pipes with copper rivets and copper wire complete as required	182.00	<b>Each</b>	3000.00	546000.00
6	NSR	Providing and fixing standard fire <b>hose</b> Box with (800 mm x 600X250 mm) with door suitable to fit in the duct made of not less han 16 SWG MS sheet and angle iron having central opening full fronted glass hinged door (4 mm thick clear glass) including necessary locking arrangement with handle as required including painting (one coat primer and two coats of fire red colour). The door shall be fixed in the masonry wall or as required. The words " <b>FIRE HOSE</b> " to be painted on the box	93.00	<b>Each</b>	10000.00	930000.00
7	NSR	Providing and fixing copper strainer at the suction pipes of fire pumps. 100 mm dia	9.00	<b>Each</b>	5975.00	53775.00
8	NSR	Supply & installation of 3 way 63mm instantaneous inlet for fire brigade connection and making connection with fire fighting pipe or under ground water tank and fixing inlets with caps and chains in a 4 mm thick glass fronted box (size : 600 x 600 x 450 mm) of 16 SWG MS sheet, fixing it on the ground level on concrete base or on MS anle iron frame, painting with two coats of fire red paints over primer coat, completing the work in all respect as per the directions of the Engineer-in-charge.	24.00	<b>Each</b>	11875.00	285000.00

Item No.	DSR Item No.	Description	Total Quantity	Unit	Rate (Rs.)	Amount in (Rs.)
9	NSR	Constructing brick manonary chamber 60 x 60 x 100 cm inside with FPX brick work in cement mortar 1:5(1 cement : 5 fine sand) for sluice valve with S.F.R.C cover and frame (heavy duty HD-20 grade designation), 560 mm internal diameter confirming to IS:12592, total weight of cover and frame to be not less than 182 Kg in cement concrete 1:2:4 mix (1 cement:2coarse sand:4 graded stone aggregate 20mm nominal size) necessary excavation, foundation concrete 1:5:10(1cement 5 fine sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:4 (1 cement : 4 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design.	33.00	Each	5170.00	170610.00
10	NSR	Providing and fixing in position M.S pipe flanged sleeves of 600 mm long (heavy class) with M.S puddle flange fabricated out of 6 mm thick MS plate in RCC walls of water tanks / retaining walls during the time of casting the same including hot dipped galvanization after fabrication and painting with two coats of anti corrosive paint over primer. 100NB	17.00	Each	1000.00	17000.00
11	NSR	Providing & Fixing 25dia air release valve with suitable fittings etc. complete.	29.00	Each	1750.00	50750.00
		<b>Sub Total</b>			<b>Sub Total</b>	<b>2916270.00</b>
		<b>MANUAL OPERATED ELECTRIC FIRE ALARM (MOEFA)</b>				
12	NSR	Supplying and fixing Manual call point with hammer, break glass and chain	18.00	Each	3800.00	68400.00
13	NSR	Hooter Providing installation testing and commissioning of electronic hooter cum speaker box fabricated from 16SWA CRCA sheet with good quality speaker filled with line matching transformer suitable to deliver speaches and siren complete as per the standard design	60.00	Each	1250.00	75000.00
14	NSR	Supplying & Fixing of electronic Hooter 6W	60.00	Each	650.00	39000.00
		<b>Sub Total</b>				<b>182400.00</b>
		<b>Total Non Schedule Items -PART-V (FIRE FIGHTING)</b>				<b>5792550.00</b>



**2 Schedule-B (EXTERNAL DEVELOPMENT WORKS )**  
**1000 STUDENTS HOSTEL AT NIT ROURKELA**  
**2.1 SCHEDULE-B-Part-(I-B) Civil Work**

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
<b>2. SCHEDULE - B</b>						
<b>2.1 SCHEDULE-B-Part-(I-B) Civil Work</b>						
<b>Earth Work</b>						
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth.1.5m in width as well as 10sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
	2.6.1	All kinds of soil	Cum	20297.00	129.35	2625416.95
2	2.25	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 m and lift upto 1.5 m.	Cum	14049.00	83.80	1177306.20
3	2.26	Extra for every additional lift of 1.5 m or part thereof in excavation /banking excavated or stacked materials.				
	2.26.1	All kinds of soil.	Cum	118.00	34.60	4082.80
	2.26.2	Ordinary or hard rock.	Cum	471.00	62.00	29202.00
<b>Cement Concrete Work</b>						
4	4.1.10	1:5:10 (1 cement: 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	Cum	25.62	3357.40	85999.88
5	4.2	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 blocs,anchor blocks,plain window sills,fillets etc up to floor five level,excluding the cost of centering shuttering and finishing:				
	4.2.6	1:3:6 (1 cement:3 coarse sand:6 graded stone aggregate 40mm nominal size)	Cum	300.00	4646.55	1393965.00
6	4.2	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 blocs,anchor blocks,plain window sills,fillets etc up to floor five level,excluding the cost of centering shuttering and finishing:				
	4.2.2	1:1.5:3 (1 cement:1.5 coarse sand:3 graded stone aggregate 20mm nominal size)	Cum	900.00	5663.30	5096970.00
<b>Reinforced Cement Concrete Work</b>						
7	4.3	Centering shuttering including strutting,propping etc. and removal of form work for .				
	4.3.1	Foundations,Footings,Bases for columns	Sqm	1500.00	166.90	250350.00
8	4.3	Centering shuttering including strutting,propping etc. and removal of form work for .				
	4.3.2	Retainig walls ,Return walls,walls (any thickness) including attached pilasters ,buttresses,plinth and string courses fillets etc.	Sqm	2400.00	285.15	684360.00
9	4.4	Providing and laying cement concrete in kerbs,steps and the like at or near ground level excluding the cost of centering ,shuttering and finishing.				
	4.4.1	1:2:4 (1 Cement:2 coarse sand:4 graded stone aggregate 40mm nominal size)	Cum	50.00	4514.05	225702.50

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
10	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	Sqm	560.00	166.90	93464.00
11	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work,using cement content work,using cement concrete as per approved design mix,including pumping of concrete to site of laying but excluding the cost of centering,shuttering ,finishing reinforcement,including admixtures in recommended proportions as per IS:9103 to accelerate,retard setting of concrete,improve workability without impairing strength and durability as per derrection of Engineer-in-charge.(Note:Cement content considered in this item is @ 330 kg/cum.Excess/less cement used as per design mix is payable/recoverable seperately)				
	5.33.1	All works up to Plinth level.	Cum	400.00	5242.15	2096860.00
12	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete. Upto plinth level.				
	5.22.6	Thermo-Mechanically Treated bars.	Kg	65000.00	62.25	4046250.00
		<b>FINISHING WORK</b>				
13	13.12	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6mm thick cement plaster 1:3 (1 cement: 3 coarse sand) finished rough with sponge.	Sqm	500.00	198.25	99125.00
		<b>Roofing Works</b>				
14	12.41	Providing and fixing on wall face unplasticised Rigid PVC rain waterpipes conforming to IS : 13592 Type A, including jointing with sealring conforming to IS : 5382, leaving 10 mm gap for thermal expansion,(i) Single socketed pipes.				
	12.41.1	75 mm diameter for Ventilating pipe	Rm	4.00	124.90	499.60
	12.41.2	110 mm diameter	Rm	16.00	206.90	3310.40
15	12.42	Providing and fixing on wall face unplasticised - PVC moulded fittings/accessories for unplasticised Rigid PVC rain water pipes conformingto IS : 13592 Type A, including jointing with seal ring conforming toIS : 5382, leaving 10 mm gap for thermal expansion.				
	12.42.4	Single tee without door				
		110x110x110 mm	Each	21.00	241.65	5074.65
		<b>Disposal</b>				
16	15.60	Disposal of building rubbish / malba /similar unserviceable,dismantled or waste material by mechanical means ,including loading,transporting,unloading to approved to municipal dumping ground or as approved by Engineer incharge,beyond 50m initial lead,for all leads including all lifts invoved.	Cum	700.00	101.75	71225.00
		<b>Road Work</b>				
17	16.78	Construction of <b>granular sub-base</b> 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.				
	16.78.1	With material conforming to Grade-I (size range 75 mm to 0.075 mm) having <b>CBR Value-30</b>	Cum	3000.00	1940.80	5822400.00

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
18	16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm ) to wet mix macadam (WMM) specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site,for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.	Cum	745.00	1960.00	1460200.00
19	16.31	Providing and applying tack coat using bitumen emulsion conforming to IS:8887,using emulsion pressure distributor including preparing the surface & cleaning with mechanical broom.				
	16.31.2	With Medium Setting Bitumen Emulsion				
	16.31.2.1	On W.B.M/W.M.M @0.4Kg/Sqm	Sqm	10000.00	14.50	145000.00
20	16.31.2.2	On bituminous surface @ 0.25kg /sqm	Sqm	9500.00	9.55	90725.00
21	16.55	Providing and laying bituminous macadam using crushed stone aggregates of specified grading, premixed with bituminous binder ,transported to site by tippers,laid over a previously prepared surface with paver finisher equipped with electronic sensor to the required grade,level alignment and rolling with smooth wheeled,vibratory and tandem rollers as per specification to achieve desired compaction and density,complete as per specifications and derection of Engineer incharge.				
	16.55.1	50 to 100mm average compacted thickness with bitumen of grade VG-30 @3.5 0% (Percentage by weight of total mix)prepared in batch type Hot Mix Plant of 100-120 TPH Capacity	Cum	300.00	6374.25	1912275.00
22	16.56	Providing and laying Semi Dense -bituminous macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler ,transporting the hot mix to site by tippers,laying with paver finisher equipped with electronic sensor to the required grade,level alignment and rolling with smooth wheeled,vibratory and tandem rollers as per specification to achieve desired compaction and density,complete as per specifications and derection of Engineer incharge.				
	16.56.1	25mm compacted thickness with bitumen of grade VG-30 @5 0% (Percentage by weight of total mix)prepared in batch type Hot Mix Plant of 100-120 TPH Capacity	Sqm	4000.00	208.15	832600.00
		<b>NP2-Pipes</b>				
23	19.6.3	Providing and laying non - pressure NP2 Class (light duty) R.C.C Pipes with collars jointed with stiff mixture in the proportion of 1:2 (1 cement:2 fine sand) including testing of joints etc. complete.	Rmtrs	300.00	422.90	126870.00
a	a	250mm dia pipe				
		<b>WATER PROOFING</b>				
24	22.1	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cudm/sqm thoroughly embedded in the 2nd layer.	sqm	100.00	732.85	73285.00
		<b>Total Civil Cost DSR Items (A)</b>				<b>28452519.00</b>
		<b>Total Civil Cost DSR Items (A)</b>			<b>(A)</b>	<b>28452519.00</b>

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
<b>2 SCHEDULE- B</b>						
<b>2.1 PART-III-B -NON SCHEDULED ITEMS (CIVIL)</b>						
25		Providing and laying filter media behind abutments, wing walls & return walls with well packed material to the specified thickness with smaller size towards the soil and bigger size towards the wall complete with all leads and lifts as per drawings and Technical Specifications Clauses 305,309,2502 and Clause 710.1.4 of IRC 78.	Cum	300.00	1168.00	350400.00
26		Providing 100mm dia weep holes in abutments, wing walls, retaining walls, return walls etc. complete as per drawings and Technical Specifications Clause 2706.	Rmtrs	180.00	95.00	17100.00
27	NSR	Providing cement concrete (M 20) Chenal kerb including painting of kerbs as per Drawing and MoRT & H Specification Clause 408 and Technical Specification.	Rmtrs	560.00	450.00	252000.00
28		Providing and applying of cementitious crystalline based water proofing for concrete rafts,wall,water tanks,concrete floors,Positive & Negative Sides of the Retaining Wall etc. with crystal T1/T2 system. The application to be done from - ve (negative) / +ve (positive)side on a wet open pore concrete surface with brush @ 0.8 Kg of crystal T2 as per manufacture specification. including making grooves of 10 x 15 mm size on the construction joints and treating with crystal T1:1 part of clear water as per manufactures specification etc. and as per direction of engineer - in -charges. The rate also includes the clearing of surface to be treated with air compressor wherever required.	Sqm	450.00	723.00	325350.00
		<b>TOTAL Non Schedule Items</b>			<b>(B)</b>	<b>944850.00</b>
		<b>TOTAL (SCHEDULED ITEM)</b>			<b>(A)</b>	<b>28452519.00</b>
		<b>GRAND TOTAL (SCHEDULED + NON SCHEDULED ITEM)</b>				<b>29397369.00</b>
		<b>TOTAL OF SCHEDULED - B (PART I) C/O TO GENERAL SUMMARY</b>				<b>29397369.00</b>

NATIONAL INSTITUTE OF TECHNOLOGY						
1000 BEDDED HOSTEL ELECTRICAL CONSOLIDATED ESTIMATE						
1.3 PART-III- SCHEDULE-A-INTERNAL ELECTRICAL WORK-DSR ITEMS						
Item No.	DSR Item No.	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
		<b>PART-III - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>				
1	1.8.3 Group B	Wiring for light Point/fan Point/exhaust fan Point/call bell Point with 1.5 sq mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit with piano type switch, phenolic laminated sheet , suitable size MS box and earthing the Point with 1.5 sqmm FR PVC insulated copper conductor single core cable as required.	4079.00	Point	499.00	2035421.00
2	1.9	Wiring for twin control light Point with 1.5 sq mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit with 2way piano type switch,phenolic laminated plate,suitable size MS box and earthing the Point with 1.5 sqmm FR PVC insulated copper conductor single core cable as required.	146.00	Point	625.00	91250.00
3	1.12	Wiring for light /power plug with 2 runs of 4 sqmm FR PVC insulated copper conductor single core in recessed PVC conduit along with 1no of 4 sq mm FR PVC insulated copper	4504.00	Per metre	162.00	729648.00
4	1.14.2	Wiring for circuit/submain wiring 2 runs of 2.5 sqmm FR PVC insulated copper conductor single core in recessed PVC conduit along with 1 no of 2.5 sq mm FR PVC insulated	27493.00	Per metre	131.00	3601583.00
5	1.14	Wiring for circuit/submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required (LDB,PDB&ELDB)				
	1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	450.00	Per metre	358.00	161100.00
	1.14.10	4 X 10 sq. mm + 2 X 10 sq. mm earth wire	3944.00	Per metre	562.00	2216528.00
6	1.21	Supply and fixing of following size of PVC conduit along with accessories in recessed including cutting the wall & making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	600.00	Per metre	56.50	33900.00
	1.21.2	25 mm	686.00	Per metre	64.50	44247.00
	1.21.3	32 mm.	4790.00	Per metre	80.50	385595.00
7	1.23.1+1.23.4	supply and fixing 5/6A Piano type switch and 3pin 5/6 amp Piano type socket outlet on the existing lighting switch box/cover including connection etc as required	1165.00	Each	65.00	75725.00
8	1.23.1+1.23.4+1.22.5	supply and fixing suitable size of metal box with phenolic laminated sheet and cover in front in recess, including providing and fixing of 2 Nos of 3pin 5/6amps piano type socket outlet and 5/6amps piano switch connection etc as required.	1098.00	Each	238.00	261324.00
9	1.23.1+1.23.4+1.22.2	supply and fixing suitable size of metal box with phenolic laminated sheet and cover in front in recess, including providing and fixing of 1 No of 3pin 5/6amps piano socket outlet and 5/6amps piano switch connection etc as required.	78.00	Each	151.50	11817.00
10	1.23.3 + 1.23.5 + 1.22.2	Supplying and fixing suitable size metal box with phenolic laminated sheet and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps Piano type socket outlet and 15/16 amps piano type switch, connection etc.as required.	209.00	Each	221.00	46189.00

Item No.	DSR Item No.	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
		<b>PART-III - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>				
11	2.2	Supplying and fixing 30 amps, 415 volts, TPN industrial type, socket outlet, with 4 pole and earth, metal enclosed plug top along with 30 amps "C" curve, TPMCB in sheet steel enclosure, on surface in recess with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.	40.00	Each	1983.00	79320.00
12	1.23.7+ 1.22.1	supply & fixing suitable size of metal box with piano TV Antenna socket, plate and cover in front, in recessed in wall including connection etc as required.	78.00	Each	112.00	8736.00
12(i)	1.23.6+1.2 2.1	supply & fixing suitable size of GI box with Piano Telephone socket, plate and cover in front, in recessed in wall including connection etc as required.	4.00	Each	120.50	482.00
13	1.22	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc. as required.(For Data)				
	1.22.1	75mm X 75mm X 60mm deep	1098.00	Each	72.00	79056.00
14		EARTHING & LIGHTNING(DSR)				
		P/F M.V. danger notice plate				
	2.21	Providing and fixing MV danger notice plate of 200 mm x 150 mm made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides , and with inscription in single red colour on FRONT side as required.	32.00	Each	121.00	3872.00

Item No.	DSR Item No.	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
		<b>PART-III - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>				
		G.I. Earth plate Electrode:				
	5.3	Earthing with G.I. earth plate 600 mm x 600 mm x 6 mm thick including accessories , and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. (but without charcoal or coke and salt) as required. (Panel body earth- 2 nos, Lightning arrester- 2 nos)	32.00	Set	3063.00	98016.00
	5.2	Earthing with GI earth pipe 2.5 mtrs long 40mm dia including accessories and providing masonry enclosure with cover plate having locking arrangement and required quantity of salt and charcoal filling as per IS 3043/1986	32.00	Each	3385.00	108320.00
		P/F 25 mm X 5 mm G.I. earth strip in surface/ recess:				
	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in	400.00	Meter	120.00	48000.00
		P/F 6 SWG G.I. loop earthing wire in sur/rec: (body earthing of DBs)				
	5.16	Providing and fixing 6 SWG G.I. wire on surface or in recess for loop earthing as required.	2000.00	Meter	30.00	60000.00
		P/F G.I. lightning conductor finial:				
	6.2	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc, complete as required.	16.00	Each	701.00	11216.00
	6.7	Providing and fixing G.I. tape 20 mm x 3 mm thick on parapet of surface of wall for lightning conductor complete as required. (for horizontal run)	2544.00	Meter	58.00	147552.00
	6.8	Providing and fixing G.I. tape 20 mm x 3 mm thick on parapet of surface of wall for lightning conductor complete as required. (for vertical run)	320.00	Meter	81.50	26080.00
	6.12	Providing and fixing testing joint made of 20 mm x 3 mm thick G.I. strip, 125 mm long with 4 nos. of G.I. bolts nuts check nuts and spring washers etc, complete as required.	16.00	Each	58.50	936.00
15	2.4	DISTRIBUTION BOARD:Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution Board, 415 volts, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required				
	2.4.4	i. 4 way (4+12), Double door	57.00	Each	1654.00	94278.00
	2.4.5	ii. 6 way (4+18), Double door.	59.00	Each	2047.00	120773.00
	2.4.6	iii. 8 way (8+24), Double door.	6.00	Each	2529.00	15174.00
16	2.2	Providing and fixing following rating and breaking capacity MCCB in existing panel board including drilling holes in panel, making connections, etc. as required.				
	2.2.1	100 Amp, 16KA	14.00	Each	2801.00	39214.00
	2.2.5	200 Amp, 25KA	6.00	Each	7290.00	43740.00
17	2.13	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.13.1	40 amps	150.00	Each	554.00	83100.00
	2.13.2	63 amps	10.00	Each	563.00	5630.00
18	2.13+2.15	RCBO (MCB+RCCB): Supplyin and fixing following rating four pole (three phase and neutral), 415 volts, residual circuit breaker with Overload (RCBO), having a sensitivity current upto 30 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required				

Item No.	DSR Item No.	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
		<b>PART-III - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>				
	2.13.2+ 2.15.3	63 amps	6.00	Each	2528.00	15168.00
19	2.15	ELCB (or) RCCB: Supplyin and fixing following rating four pole (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 30 milliampere in the existing MCB DB complete with connections, testing and commissioning etc. as required				
	2.15.2	40 amps	108.00	Each	1703.00	183924.00
	2.15.1	25 amps	8.00	Each	1679.00	13432.00
20	2.1	MCB : Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single Pole	390.00	Each	141.00	54990.00
	2.10.3	Double Pole	72.00	Each	379.00	27288.00
	2.10.5	Triple Pole	12.00	Each	562.00	6744.00
21	9.1	Supply and making end termination with brass compression gland and aluminum lugs for for following size of PVC insulated and PVC sheathed/XLPE aluminum conductor cable of 1.1 KV grade as required.				
	9.1.36	4C x 50 sq mm alu arm cable	12.00	Each	265.00	3180.00
22	7.6	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV Grade of following size in the existing masonry.				
	7.6.2	4C x 50 sq mm alu arm cable	100.00	Per meter	15.00	1500.00
		<b>TOTAL PART-II (A) - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>	56864.00			11074048.00
		<b>TOTAL PART-II (A) - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>	66024.79			11074048.00



Item No.	DSR Item No.	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
		<b>PART-III - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>				
		<b>INTERNAL ELECTRICAL WORK - NSR ITEMS</b>				
23	NSR	Supplying of factory assembled Industrial batten box/batten type surface mounting on wall or ceiling lighting fixture, similar to PHILIPS TMS 122 M 1X TL528W EBT with 1 no 28 watts T5 lamps.	2640.00	Each	1140.00	3009600.00
24	NSR	Supply and fixing of 11W CFL lamp s Philips or Equivalent with Batton Holder.	394.00	Each	213.00	83922.00
25	NSR	supply and fixing of 36w FLT (T5) street light fitting glass cover, Philips Make Cats cat log no HGS120 1xTL-D36W IC or Equivalent	12.00	Each	1512.00	18144.00
26	NSR	Supplying of factory assembled Industrial batten box/batten type surface mounting on wall or ceiling lighting fixture, similar to PHILIPS TMS 122 M 2X TL528W EBT with 2 no 28 watts T5 lamps.	219.00	Each	1450.00	317550.00
27	NSR	Supplying of factory assembled Industrial batten box/batten type surface mounting on wall or ceiling lighting fixture, similar to PHILIPS TMS 122 M 2X TL554W EBT with 2 no 54 watts T5 lamps.	30.00	Each	1916.00	57480.00
28	NSR	Supplying, installation, testing and commissioning of following size special design energy saving ceiling fans along with fan hook similar to Bajaj ES-50/cromptons or equivalent with low power consumption as specified below aluminum motor covers of larger diameters complete with double ball bearings, Aluminium blades, down rod, shackle insulator, canopy but without regulator etc complete as required supply and fixing of 1200mm sweep ceiling fan	1549.00	Each	1692.00	2620908.00
29	NSR	supply and fixing piano stepped type electronic fan regulator on the existing switch box including connection and cover plate	1549.00	Each	207.00	320643.00
30	NSR	supply and fixing of 300mm dia exhaust fan with double ball bearing and dmetallic blade	171.00	Each	1536.00	262656.00
31	NSR	MCB : Supplying and fixing 0.5 amps to 6 amps rating, 240/415 volts, "D" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	0.00			
		i. Single Pole	1356.00	Each	318.00	431208.00
32	NSR	Supply and Laying of following size of PVC insulated and PVC sheathed/XLPE aluminum conductor cable of 1.1 KV 4C x 50 sq mm alu arm cable	100.00	Each	616.00	61600.00

Item No.	DSR Item No.	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
		<b>PART-III - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>				
33	NSR	supply and erection of powder coated floor mounting <b>LSB-A1 panel</b> made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic digital meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	4.00	Each	70437.50	281750.00
		i) 200A TPN MCCB 25KA -1 no				
		ii) 100A TPN MCCB 16KA -1 no				
		iii) 63A TPN MCB -1 no				
		iii) 40A TPN MCB -10 nos				
33(i)	NSR	supply and erection of powder coated floor mounting <b>LSB panel</b> made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic digital meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	2.00	Each	73071.00	146142.00
		i) 200A TPN MCCB 25KA -1 no				
		ii) 100A TPN MCCB 16KA -1 no				
		iii) 63A TPN MCB -1 no				
		iv) 40A TPN MCB -12 nos				
33(ii)	NSR	supply and erection of powder coated floor mounting <b>LSB panel</b> made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic digital meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	1.00	Each	52745.00	52745.00
		i) 100A TPN MCCB 16KA -1 no				
		ii) 40A TPN MCB -8 nos				
33(iii)		supply and erection of powder coated floor mounting <b>LSB panel</b> made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic digital meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	1.00	Each	50111.00	50111.00
		i) 100A TPN MCCB 16KA -1 no				
		ii) 40A TPN MCB -6 nos				
34	NSR	supply and erection of powder coated floor mounting <b>LSB panel</b> made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic digital meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	6.00	Each	62537.00	375222.00
		i) 100A TPN MCCB 16KA -1 no				
		ii) 40A TPN MCB -12 nos				

Item No.	DSR Item No.	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
		<b>PART-III - INTERNAL ELECTRICAL WORK - DSR ITEMS</b>				
34(i)	NSR	supply and erection of powder coated floor mounting 3PHASE DB panel made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic digital meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	2.00	Each	59329.00	118658.00
		i) 125A TPN MCCB 16KA -1 no				
		ii) 63A 4P MCB -2nos				
		ii) 32A TP MCB -8 nos				
35	NSR	Supplying, terminating, testing and commissioning of End termination and connection of FRLS aluminium / copper conductor armored UG cable including supply of single compression, type tinned brass cable glands, suitable size tinned copper crimping type lugs, including gland earthing as required.				
		i) 4 Core 6 Sq.mm, 1.1 KV gr. copper cable	16.00	Each	287.00	4592.00
		i) 4 Core 10 Sq.mm, 1.1 KV gr. copper cable	228.00	Each	300.00	68400.00
35(i)		Supplying and laying of Single run of CAT -6 Telephone cable in the existing conduit. As per the manufacturer specification and as per the direction of engineer in charge	96.00	Per metre	45.00	4320.00
36	NSR	Safety equipments:				
		supply and delivery of the following safety equipments with allied material as required by the statutory authority like CEIG	8.00	Set	20000.00	160000.00
		a) 10 kg capacity DCP type fire extinguisher -2 nos				
		b) Fire bucket stand with 4nos round bottom fire bucket - 1sets				
		c) First aid box small size -1set				
		d) first aid resuscitation chart laminated both in local language and english -1 sets				
		<b>TOTAL NON SCHEDULE ITEM (B)</b>				8445651.00
		<b>TOTAL SCHEDULE ITEM (A)</b>				11074048.00
		<b>TOTAL SCHEDULE ITEM(A) + NON SCHEDULE ITEM(B)</b>				19519699.00
		<b>SUMMARY OF PART -III -INTERNAL ELECTRICAL SCHEDULED &amp; NON SCHEDULED ITEMS</b>				19519699.00

# NATIONAL INSTITUTE OF TECHNOLOGY

## SCHEDULE-B

### 2.3 External Electrical Works DSR Items - Part- III

Item No	DSR code	Description	Unit	Qty	Rate	Amount Rs.
		<b>SCHEDULE-B</b>				
		<b>2.3 External Electrical Works DSR Items - Part- III</b>				
		<b>MV CABLES LAYING</b>				
1	7.1	Laying of one number PVC insulated and PVC sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.				
	7.1.4	i) 3.5C x 300 sq mm alu arm cable	RM	1000	94	94000.00
	7.1.2	ii) 4C x 70 sq mm alu arm cable	RM	410	72	29315.00
	7.1.1	iii) 4C x 35 sq mm alu arm cable	RM	420	66	27510.00
	7.1.1	iv) 4C x 25 sq mm alu arm cable	RM	30	66	1965.00
2	9.1	Supply and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed/XLPE aluminum conductor cable of 1.1 KV grade as required.				
	9.1.30	i) 3.5C x 300 sq mm alu arm cable	Each	8	867	6936.00
	9.1.23	ii) 4C x 70 sq mm alu arm cable	Each	12	297	3564.00
	9.1.35	iii) 4C x 35 sq mm alu arm cable	Each	8	224	1792.00
	9.1.34	iv) 4C x 25 sq mm alu arm cable	Each	2	192	384.00
	9.1.32	v) 4C x 10 sq mm copper arm cable	Each	4	146	584.00
3	2.2	Providing and fixing following rating and breaking capacity MCCB in existing panel board including drilling holes in panel, making connection, etc as required.				
	2.2.9	i) 400 Amp 4P, 35KA	Each	2	16605	33210.00
	2.2.5	ii) 200 Amp 4P, 25KA	Each	12	7290	87480.00
	2.2.1	iii) 100 Amp 4P, 16KA	Each	2	2801	5602.00
4	2.1	Supply and fixing 5 amps to 32 amps rating, 240/415 volts "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.5	i) Triple Pole and Neutral	Each	8	723	5784.00
5	2.13	Supplying and fixing following rating, four pole,415 volts, isolator in the existing MCB DB complete with connections testing and commissioning etc. as required.				
	2.13.2	i) 63 Amp	Each	5	563	2815.00

Item No	DSR code	Description	Unit	Qty	Rate	Amount Rs.
6	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar , interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator).				
	2.4.1	i) 4 Way (4+12), Single Door	Each	1	1230	1230.00
<b>Total External Electrical Cost DSR Items (A)</b>						<b>302171.00</b>
<b>Total External Electrical DSR Items - Part-II-B</b>						<b>302171.00</b>
<b>PART-III External Electrical Works NSR Items</b>						
7	NSR	supply and erection of powder coated floor mounting <b>DB-1 panel</b> made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	each	1	78338	78338.00
		i) 400A 4P MCCB 35KA -1 no				
		ii) 200A 4P MCCB 25KA -5nos				
		iii) 100A 4P MCCB 16KA -1no				
8	NSR	supply and erection of powder coated floor mounting <b>DB-2 panel</b> made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	each	1	82288	82288.00
		i) 400A 4P MCCB 35KA -1 no				
		ii) 200A 4P MCCB 25KA -7nos				
9	NSR	supply and erection of powder coated floor mounting <b>LSB-9 panel</b> made of 1.6mm thick CRCA sheet steel dust and vermin proof encloser with suitable size of aluminium bus bar for main and interconnecting switchgear, Electronic meter for measuring KWh with necessary CT's,3 phase indication lamp and earthing as per requirement of CEIG and IE regulation. For the provision of following rated switchgear in the panel	each	1	50686	50686.00
		i) 100A 4P MCCB 16KA -1no				
		ii) 63A 4P MCB -3nos				
10	NSR	<b>MV CABLES</b> Supply and Laying following size of 1.1KV grade UG arm cable on trench as per IS standard [Make: Polycab]				
		i) 4C x 10 sq mm copper arm cable	RM	300	523	156900.00
		ii) 4C x 6 sq mm copper arm cable	RM	2000	339	678000.00

Item No	DSR code	Description	Unit	Qty	Rate	Amount Rs.
11	NSR	Supplying, terminating, testing and commissioning of End termination and connection of XLPE (FRLS) aluminium / copper conductor armored UG cable including supply of single compression, type tinned brass cable glands, suitable size tinned copper crimping type lugs, including gland earthing as required.				
		i) 4C x 6 sq mm copper arm cable	Each	126	137	17262.00
12	NSR	Supply of following size of 1.1KV grade UG arm cable on trench as per IS standard [Make: Polycab]				
		i) 3.5 x 300 sq mm alu arm cable	RM	1000	1408	1408000.00
		ii) 4C x 70 sq mm alu arm cable	RM	410	404	165640.00
		iii) 4C x 35 sq mm alu arm cable	RM	420	228	95760.00
		iv) 4C x 25 sq mm alu arm cable	RM	30	179	5370.00
		<b>STREET LIGHT</b>				
		Street light DB with timer controller				
13	NSR	Supply ,erection , testing and commissioning of outdoor type Street light Distribution feeder pillar with 14 SWG CRCA plain black sheet steel enclosure to accommodate 4 way TPN MCB DB for street light power distribution and one no of 24 hrs timer with 63A power contactor for automatic ON/OFF of street light. For the provision of following rated switchgear in the panel	Each	2	17239	34478.00
		i) 63A 4P MCB - 1No				
		ii) 32A TPN MCB - 4Nos				
14	NSR	Supply,delivery & installation of 7m long octagonal GI Pole made out of 3mm thick galvenised sheets (both inner and outer surface being galvanised) with botton dia of 150mm, top dia of 76mm similar to bajaj type BOP-7030 or equivalent with a foundation base plate of size 240x240x20mm and 4nos. 20mm dia anchor bolts duly embedded in 1:2:4 P.C.C including excavation of pit,concreting providing PVC pipes of cable entry, providing junction box with 6amp SP MCB loop in loop out arrangement termal block wiring with 3core 1.5sq.mm PVC insulated copper wire from junction box upto the fitting and with a bracket of 1500 mm as required as per direction of Engineer in charge.	Each	28	12731	356468.00
15	NSR	Supply,delivery & installation of 4m long octagonal GI Pole made out of 3mm thick galvenised sheets (both inner and outer surface being galvanised) with botton dia of 150mm, top dia of 76mm similar to bajaj type BOP-4030 or equivalent with a foundation base plate of size 240x240x20mm and 4nos. 20mm dia anchor bolts duly embedded in 1:2:4 P.C.C including excavation of pit,concreting providing PVC pipes of cable entry, providing junction box with 6amp SP MCB loop in loop out arrangement termal block wiring with 3core 1.5sq.mm PVC insulated copper wire from junction box upto the fitting and with a bracket of 1500 mm as required as per direction of Engineer in charge.	Each	35	7763.00	271705.00

Item No	DSR code	Description	Unit	Qty	Rate	Amount Rs.
16		Green line smart 24W LED Street Light with high efficiency Lumen and dust Resistant Protection (IP 65) Class I type Philips Make : BRP 020 1 X 10LED-SI HP/CW PSU RR	Each	35	4916	172060.00
17		Green line smart 90W LED Street Light with high efficiency Lumen and dust Resistant Protection (IP 65) Class I type Philips Make : BRP 020 2 X 24LED- HP/CW PSU GR	Each	28	21994	615832.00
18	NSR	Preparing and obtaining the approval from CEIG to carryout electrical installation and duly submitting the drawing for approval including necessary inspection fees for inspection and obtaining Safety certificate for entire new installation	1	LS	100000	<b>100000.00</b>
		<b>Total External Electrical Cost DSR Items (B)</b>				<b>4288787.00</b>
		<b>Total External Electrical Cost DSR Items (A)</b>				<b>302171.00</b>
		<b>GRAND TOTAL (SCHEDULED + NON SCHEDULED ITEM)</b>				<b>4590958.00</b>
		<b>TOTAL OF SCHEDULED-B (PART III) C/O TO GENERAL SUMMARY</b>				<b>4590958.00</b>

**2 Schedule-B (EXTERNAL DEVELOPMENT WORKS )**

1000 STUDENTS HOSTEL AT NIT ROURKELA

**2.2 Schedule-B****EXTERNAL WATER SUPPLY AND SANITARY WORK - Part II**

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
<b>2. SCHEDULE - B</b>						
<b>2.2 Schedule-B</b>						
<b>EXTERNAL WATER SUPPLY AND SANITARY WORK - Part II</b>						
1	18.9.	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.				
	18.9.3	25 mm nominal outer dia .Pipes	Rm	100.00	185.15	18515.00
	18.9.5	40 mm nominal outer dia .Pipes.	Rm	175.00	309.60	54180.00
	18.9.6.	50mm nominal inner dia .Pipes	Rm	240.00	475.70	114168.00
	18.9.7	62.50 mm nominal inner dia Pipes.	Rm	250.00	1326.35	331587.50
	18.9.8.	75mm nominal inner dia .Pipes	Rm	1750.00	1854.85	3245987.50
2	18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.				
	18.12.3	25 mm dia nominal bore	Rm	100.00	209.40	20940.00
	18.12.4	32 mm dia nominal bore	Rm	100.00	248.55	24855.00
	18.12.5	40 mm dia nominal bore	Rm	250.00	294.20	73550.00
	18.12.6	50 mm dia nominal bore	Rm	350.00	355.95	124582.50
	18.12.7	65 mm dia nominal bore	Rm	600.00	453.55	272130.00
	18.12.8	80 mm dia nominal bore	Rm	550.00	573.40	315370.00
3	18.17.	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	18.17.5	65 mm dia nominal bore	Each	40.00	1073.25	42930.00
	18.17.6.	80mm nominal bore	Each	35.00	1832.95	64153.25
4	18.19.	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
	18.19.4.	50 mm nominal bore				
	18.19.4.1.	Horizontal	Each	15.00	936.35	14045.25
	18.19.4.2.	Vertical	Each	25.00	1110.55	27763.75
	18.19.6.	80 mm nominal bore				
	18.19.6.1.	Horizontal	Each	25.00	2392.95	59823.75
	18.19.6.2.	Vertical	Each	10.00	3089.85	30898.50
5	18.33	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve,with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size ) , i/c 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 :				



Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
	18.33.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	15.00	5392.90	80893.50
6	18.34	Constructing masonry Chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve,with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size ), i/c 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 :				
	18.34.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	15.00	9277.10	139156.50
7	18.59	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces,tapers etc if required will be paid separately				
	18.59.1	50 mm nominal bore	Each	5.00	4018.15	20090.75
	18.59.2	80 mm nominal bore	Each	5.00	5830.10	29150.50
8	18.72.	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329				
	18.72.1.	100 mm dia Ductile Iron Class K-7 pipes	Rm	450.00	840.25	378112.50
9	19.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1fine sand) including testing of joints etc. complete				
	19.1.1	100 mm diameter	Rm	250.00	150.10	37525.00
	19.1.2	150 mm diameter	Rm	1200.00	219.05	262860.00
10	19.2	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 :				
	19.2.1	100 mm diameter	Rm	250.00	496.90	124225.00
	19.2.2	150 mm diameter	Rm	1200.00	607.70	729240.00
11	19.3.	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design				
	19.3.1	100 mm diameter	Rm	250.00	236.15	59037.50
	19.3.2	150 mm diameter	Rm	1200.00	382.75	459300.00
12	19.4	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 x300 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 :				
	19.4.1	100x100 mm size P type				
	19.4.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	45.00	1256.35	56535.75
	19.4.3	180x150 mm size P type				
	19.4.3.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	250.00	1365.55	341387.50

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
13	19.6	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				
	19.6.4.	300 mm diameter	Rm	1600.00	422.90	676640.00
	19.6.5.	500 mm diameter	Rm	1150.00	620.85	713977.50
14	19.7	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) 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 :				
	19.7.1.	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				
	19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	22.00	7132.00	156904.00
15	19.7.2	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) :				
	19.7.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	23.00	15322.95	352427.85
16	19.8.	Extra for depth for manholes				
	19.8.1	Size 90x80 cm				
	19.8.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Rm	13.00	4061.70	52802.10
17	19.8.	Extra for depth for manholes				
	19.8.2	Size 120x90 cm				
	19.8.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Rm	12.00	4866.75	58401.00
18	19.11	Constructing brick masonry circular manhole 1.22m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) and making necessary channel 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 all complete as per standard design				
	19.11.1	1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately				
	19.11.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	48.00	12943.40	621283.20

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
	19.11.1.1.					
19	19.12.	Extra depth for circular type manhole 1.22m internal dia (at bottom) beyond 1.68 m to 2.29 m				
	19.12.1.	With Sewer bricks conforming IS : 4885	Rm	40.00	4522.30	180892.00
20	19.13	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) and making necessary channel 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 all complete as per standard design :				
	19.13.1.	2.30m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) :				
	19.13.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	65.00	26873.70	1746790.50
21	19.14	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30 m				
	19.14.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Rm	45.00	10643.40	478953.00
22	19.16	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS : 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design	Each	150.00	256.75	38512.50
23	19.30	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with 75 class designation 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 1:2:4 mix (1 cement : 2 coarse sand : 4 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 :				
	19.30.2.	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :				

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
	19.30.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	15.00	4556.55	68348.25
24	19.31	Extra for depth beyond 45 cm of brick masonry chamber :				
	19.31.2	For 500x700 mm size				
	19.31.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Rm	25.00	3081.70	77042.50
25	19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.				
	19.32.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	4.00	15228.15	60912.60
26	19.33	Constructing soak pit 1.20x1.20x1.20 m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	Each	4.00	1591.35	6365.40
		<b>Total External Water Supply &amp; Sanitary Cost DSR Items</b>			<b>(A)</b>	<b>12843247.00</b>
		<b>Total External Water Supply &amp; Sanitary Cost DSR Items (Part -I B)</b>				<b>12843247.00</b>
<b>PART II - EXTERNAL WATER SUPPLY-NSR ITEMS</b>						
1	NSR	Construction of <b>percolation well / rain water harvest pit</b> of 2 m dia and 3m deep with precast RCC rings, covering the top with RCC slab including supply and fixing 600 x 600 RCC MH cover CI / MS rungs etc. The quoted rate shall include earth work excavation, back filling, removing excess earth and making good the floor. The percolation well harvest pit shall be constructed as per the detail drawings and specification shall consists of:	Each	20.00	75000.00	1500000.00
		Allernate layers of brick bats, activated charcoal, gravel, pebbles and topped with fine sand for good infiltration.				
		5 Nos. bore holes of 160 mm dia from the bottom of percolation pit for a depth of 6m, drilled by using auger manually.				
		Bore hole to be filled with medium sized pebbles to provide mechanical strength to the holes and enhance infiltration.				
		Rate quoted shall be inclusive of earth work excavation, back filling, removing of excess earth as per the instructions of engineer - in charge.				
		<b>BORE WELL</b>				
2	NSR	Providing and constructing borewell of 165mm dia & 300Rm depth including providing and fixing PVC casing pipes of approved quality 165mm internal dia including accessories, labour tools and required equipment etc.,complete.				
		Identifying the point for drilling the borewell	Each	1.00	5000.00	5000.00
3		Drilling of 165mm dia average pilot bore by mud slush direct rotary ring in all sorts of soil of as per IS-2800 suitable for 165mm dia bore PVC pipes including carting of rig and other equipments at site etc. complete	Rm	300.00	750.00	225000.00
	NSR	<b>Borewell casing pipe</b>				
4		Providing fixing 160mm dia PVC casing pipes Confirming to IS in borewell to a required depth etc.,complete.	Rm	100.00	750.00	75000.00
5	NSR	Testing of water samples, as directed by engineers/consultant	Each	1.00	1500.00	1500.00
6	NSR	Supplying and fixing heavy duty clamp of size 900mmx100mmx15mm with bolts and nuts etc.complete	Pair	4.00	1286.00	5144.00
7	NSR	Providing and fixing top cap of PVC Dummy suitable for 165mm dia nominal bore pipe etc. complete	Each	1.00	600.00	600.00
		<b>Submersible pumpset in tube well</b>				

Item No.	DSR Item No.	Description	Unit	Total Qty	Rate (Rs.)	Amount (Rs.)
8	NSR	Design, supply and installation of submersible pumpsets of 3 phase electric motor frame with coupling guard and it's fastners, and pumping water from borewell including providing, laying jointing 65mm dia GI pipe "C" class confirmed as per relevant IS code pump shall be installed at a depth of 65m from ground level and delivery pipe shall be left 1.50m above ground level. Rate to include cost of pumpsets, GI pipes with in the borewell, 3 core x 4sqmm electric cable, star delta starter, single phase preventer, dry running preventer, outer door type electrical panel board, start & stop bush button, voltmeter Amper meter, etc., provision for the maintenance of the pumps, chain block with pulley etc. complete. The supplier shall give one year guarantee, complete as specified and directed by Engineers's/consultant.	Each	1.00	163601.00	163601.00
		Make : KSB / Texmo / Kirloskar / Suguna or equivalent				
		HP: Suitable HP for considering the capacity & Head of pumpsets				
		Capacity; 625 lpm				
		Head ; 145 m of water column				
		Nominal speed: 2900 rpm				
		Material of construction				
		Body : CI				
		Impeller: Stainless steel				
		Stator : Steel				
		Rotor: Steel				
		Shaft : Stainless steel				
		<b>Centrifugal pumpsets(Submersible, monoblock type) for pumping water from Domestic water collection sump to common over head tank</b>				
		<b>Sewage pumpsets</b>				
9	NSR	Design, supplying, Installation, commissioning and testing of submersible pumpsets with 3 phase electric motor (1450 Rpm) for pumping of sewage Containing solids of maximum size 50mm with 100mm dia GI "C" class Pipe from pump to NRV approximately 5m, suitable size electrical cable, starter, single phase preventer, overhead and reverse rotation protection device, oil seal failure, indication sensor, automatic control for on / off switch and outdoor type panel board for housing the starter etc., complete	Each	2.00	52578.00	105156.00
		Make : Suguna, KSB, kirloskar & Texmo or equivalent				
		Capacity: 9.6Lps				
		Head : 20m				
		Material of construction:				
		Pump casing : cast iron				
		Impeller : CF8m				
		Shaft : c-45				
		<b>Total External Water Supply &amp; Sanitary Cost NSR Items</b>			(B)	<b>2081001.00</b>
		<b>Total Schedule Item DSR</b>			(A)	<b>12843247.00</b>
		<b>GRAND TOTAL (SCHEDULED + NON SCHEDULED ITEM)</b>				<b>14924248.00</b>
		<b>TOTAL OF SCHEDULED - B (PART II) C/O TO GENERAL SUMMARY</b>				<b>14924248.00</b>