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TENDER

BHEL NIT NO: 14708

CIVIL TENDER SCHEDULE NO: 05/13-14

FOR

"Construction OF NEW RESIDENTIAL BUILDINGS IN BHEL TOWNSHIP
FOR BHEL IVP GOINDWAL SAHIB, PUNJAB."

PART2-PRICE BID**BHARAT HEAVY ELECTRICALS LIMITED**

(A Govt. Of India Undertaking)
**INDUSTRIAL VALVES PLANT,
433, INDUSTRIAL COMPLEX
GOINDWAL SAHIB,
DISTT. TARN –TARAN,
PUNJAB , PIN-143422**

CONTRACTOR

ACCEPTING OFFICER (BHEL)



ISO9001,ISO14001
OHSAS18001certified

BHARAT HEAVY ELECTRICALS LIMITED
(A Govt. Of India Undertaking)

INDUSTRIAL VALVES PLANT

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GOINDWAL SAHIB, Distt. TARN-TARAN,
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THIS TENDER SPECIFICATION ISSUED TO:

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**BHEL NIT
NO 14708**

NOTICE INVITING TENDER

{Volume 2 or Part 2 Price Bid}

**Bharat Heavy Electricals Limited
Industrial Valves Plant
Goindwal, Punjab**



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SCHEDULE 'A'**BILL OF QUANTITIES CUM PRICE SCHEDULE****TABLE 1**

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
1	2.1.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth up to 50 m and lift up to 1.5 m, disposed soil to be leveled and neatly dressed :				
		All kinds of soil	2268.00	SQM	37.87	85889.16
2	2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50m and lift up to 1.5m,disposed earth to be leveled and neatly dressed.				
		All kinds of soil	155.00	CUM	129.35	20049.25

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
3	2.8.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
		All kinds of soil.	4238.00	CUM	130.80	554330.40
4	2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m including getting out the excavated soil, and then returning the soil as required, inlayers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				
	2.10.1	All kinds of soil				
	2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	4966.00	Metre	165.60	822369.60

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
5	2.11	Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. (Rate is over corresponding basic item for depth up to 1.5 metre).	51.00	Metre	223.56	11401.56
6	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 up to 1.5 m.	2969.00	CUM	83.80	248802.20
7	2.26.1	Extra for every additional lift of 1.5 m or part thereof in excavation /banking excavated or stacked materials in all Kind of soil	73.00	CUM	34.60	2525.80
8	2.27+ 16.3.9	Supplying and filling in plinth with good earth under floors, including watering, ramming, consolidating and dressing complete.	770.00	CUM	369.60	284592.00
9	2.27	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	493.00	CUM	749.30	369404.90
10	2.34	Supplying chemical emulsion in sealed containers including delivery as specified.				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
	2.34.1	Chlorpyriphos/ Lindaneemulsifiable concentrate of 20%	3187.00	Ltr	185.95	592622.65
11	2.35	Diluting and injecting chemical emulsion for POST- CONSTRUCTIONAL anti- termite treatment (excluding the cost of chemical emulsion) :				
	2.35.1.1	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall &rodding etc. complete:				
		With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration.	3670.00	Metre	11.80	43306.00
12	2.35.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :				
	2.35.3.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.	4941.00	SQM	88.25	436043.25
13	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		- All work up to plinth level :				
13a	4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	60.00	CUM	2655.65	159339.00
13b	4.1.8	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	825.00	CUM	2606.02	2149966.50
14	4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	10.00	SQM	132.05	1320.50
15	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specifications	10.00	per 50 Kg of cement	35.35	353.50
16	4.13	Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with apiece of cloth lightly soaked in kerosene oil.	10.00	SQM	96.65	966.50
17	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm	432.00	SQM	274.87	118743.84

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		nominal size, well rammed and consolidated and grouted with fine sand including finishing the top smooth				
18	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 :				
	5.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	129.00	CUM	2845.50	367069.50
19	5.9	Centering and shuttering including strutting, propping etc. and removal of form for: Foundations, footings, bases of columns, etc. for mass concrete.				
19 a	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	13.00	SQM	166.90	2169.70
19 b	5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	69.00	SQM	285.15	19675.35
19 c	5.9.3	Suspended floors, roofs, landings, balconies and access platform.	7436.00	SQM	311.20	2314083.20
19 d	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	8320.00	SQM	262.25	2181920.00
19 e	5.9.7	Stairs, (excluding landings) except spiral-	861.00	SQM	326.30	280944.30

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		staircases.				
19 f	5.9.16	Edges of slabs and breaks in floors and walls.				
	5.9.16.1	Under 20 cm wide	2754.00	Metre	99.45	273885.30
20	5.13	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m clear span up to floor five level including the cost of required centering, shuttering but excluding the cost of reinforcement, with 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 20mm nominal size).	18.00	CUM	5410.38	97386.84
21	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above/upto plinth level.				
	5.22.A6	Thermo-Mechanically Treated bars.	147.00	MT	7400.00	1087800.00
22	5.23	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand)	180.00	SQM	79.51	14311.80
23	5.30	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	1981.00	Metre	22.25	44077.25
24	5.33	Providing and laying in position machine batched and machine				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and 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 direction of Engineer-in-charge.				
24 a	5.33.1	All works up to plinth level.	35.00	CUM	3325.67	116398.45
24 b	5.33.2	All works above plinth level up to floor V level.	1735.00	CUM	3865.02	6705809.70
25	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	2052.00	CUM	2953.58	6060746.16
26	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 in all shapes and sizes in :				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
	6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	3200.00	CUM	3513.18	11242176.00
27	6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
	6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	3848.00	SQM	415.29	1598035.92
28	6.15	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry.	3848.00	SQM	0.45	1731.60
29	8.2	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
29a	8.2.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		marble.				
	8.2.1.2	Area of slab over 0.50 sqm.	144.00	SQM	1927.25	277524.00
29b	8.2.2	Granite of any colour and shade				
	8.2.2.2	Area of slab over 0.50 sqm.	6.00	SQM	3030.55	18183.30
30	8.3	Providing edge moulding to 18mm 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.				
30 a	8.3.1	Marble work	328.00	Metre	105.70	34669.60
30 b	8.3.2	Granite work.	10.00	Metre	178.75	1787.50
31	8.5	Extra for providing opening of required size & shape for wash basins/ kitchen sink in kitchen platform, vanity counters and similar location in marble/Granite/stone work including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	91.00	No.	281.10	25580.10
32	8.6	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	150.00	SQM	163.10	24465.00

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
33	9.5	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws excluding, panelling which will be paid for separately, all complete as per direction of Engineer-in-charge.				
	9.5.1	Second class teak wood				
	9.5.1.1	35 mm thick shutters	18.00	SQM	2434.05	43812.90
34	9.7	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick :				
	9.7.7.2	5.5 mm thick glass panes	715.00	SQM	1113.40	796081.00
35	9.10+9.11	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS: 14616 and TADS 15:2001 (Part B) , using 5.5 mm thick float glass panes for doors, windows and clerestory windows including ISI marked M.S. pressed butt hinges bright				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		finished of required size with necessary screws as per directions of Engineer-in-charge.				
		30 mm thick shutters	584.00	SQM	2231.05	1302933.20
36	9.20	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
36 a	9.20.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	120.00	SQM	2159.05	259086.00
36 b	9.20.3	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws.	48.00	SQM	1789.45	85893.60
37	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 :				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
37 a	9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	940.00	SQM	1578.30	1483602.00
37 b	9.21.3	25mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws.	612.00	SQM	1266.75	775251.00
38	9.27.2	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws:				
		30 mm thick shutters.				
	9.27.2.1.1	with ISI marked M.S. pressed butt hinges bright finished of required size. -Second class teak wood	16.00	SQM	2412.65	38602.40
39	9.31	Providing and fixing wire gauge laminated veneer lumber shutters conforming to IS : 14616, and as per TADS 15 :2001 (Part B) using galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63mm as per IS :1568 for doors, windows and clerestory windows including ISI marked M.S. pressed butt hinges bright finished of required size				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		with necessary screws as per directions of Engineer-in-charge:				
	9.31.2	30 mm thick shutters	1182.00	SQM	1842.00	2177244.00
40	9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :				
	9.47.2	25 mm dia (heavy type)	959.00	Metre	117.55	112730.45
41	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.	15568.00	Kg	90.75	1412796.00
42	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 coarse sand : 6 graded stone aggregate 20mm nominal size)	152.00	Each	91.41	13894.32
43	9.74	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
43 a	9.74.1	250x10 mm	52.00	Each	280.70	14596.40
43 b	9.74.2	200x10 mm	40.00	Each	219.30	8772.00
43 c	9.74.3	150x10 mm	28.00	Each	178.65	5002.20
43 d	9.74.4	100x10 mm	5.00	Each	117.55	587.75

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
44	9.79	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers including necessary screws etc. complete (best make of approved quality) :				
44 a	9.79.2	50 mm	88.00	Each	147.05	12940.40
44 b	9.79.3	65 mm	42.00	Each	152.85	6419.70
45	9.80	Providing and fixing 50 mm bright finished brass cup board or wardrobe knob with necessary screws (best make of approved quality)	10.00	Each	40.20	402.00
46	9.81	Providing and fixing bright finished brass handles with screws etc. complete :				
46 a	9.81.1	125 mm	44.00	Each	169.60	7462.40
46 b	9.81.2	100 mm	24.00	Each	151.85	3644.40
46 c	9.81.3	75 mm	30.00	Each	117.00	3510.00
47	9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	92.00	Each	73.40	6752.80
48	9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000mm) with double speed adjustment with necessary accessories and screws etc.	208.00	Each	981.75	204204.00

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		complete.				
49	9.85	Providing and fixing bright finished brass casement window fastener with necessary screws etc. complete.	18.00	Each	60.35	1086.30
50	9.86	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc. complete :				
	9.86.1	300 mm weighing not less than 330 gms	18.00	Each	149.05	2682.90
51	9.87	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete:				
	9.87.2	115 mm	550.00	Each	79.30	43615.00
52	9.96	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :				
52 a	9.96.1	300x16 mm	340.00	Each	203.80	69292.00
52 b	9.96.2	250 x 16 mm	372.00	Each	168.95	62849.40
53	9.97	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
53 a	9.97.1	300x10 mm	1140.00	Each	100.40	114456.00

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
53 b	9.97.2	250x10 mm	842.00	Each	86.45	72790.90
53 c	9.97.3	200x10 mm	1748.00	Each	71.05	124195.40
54	9.100	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
54 a	9.100.1	125 mm	2312.00	Each	62.50	144500.00
54 b	9.100.2	100 mm	2356.00	Each	49.55	116739.80
54 c	9.100.3	75 mm	212.00	Each	41.90	8882.80
55	9.101	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868)transparent or dyed to required colour and shade with necessary screws etc. complete.				
	9.101.2	Twin rubber stopper	1084.00	Each	71.55	77560.20
56	9.102	Providing and fixing aluminium casement stays ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.	848.00	Each	62.45	52957.60
57	9.103	Providing and fixing bright finished brass 100 mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC	185.00	Each	706.15	130637.75

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		10 as per IS : 1868) aluminium lever handles with necessary screws etc. complete (Best make of approved quality).				
58	9.114	Providing and fixing magnetic catcher in cupboard / ward robe shutters including fixing with necessary screws etc. complete (Best make of approved quality).				
	9.114.1	Triple strip vertical type.	368.00	Each	21.90	8059.20
59	9.123	Providing and fixing factory made door frame (single rebate) made out of single piece extruded solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 62 mm width & 32 mm thickness, frame will be mitred & Jointed with self drivenself tapping screws of size 38 mm x 4 mm & PVC solvent cement , including fixing the frame to wall with suitable dia & length anchor fastener as per manufacturer's specification and direction of Engineer-in-charge.	811.00	Metre	334.90	271603.90
60	9.124	Providing and fixing factory made 30 mm thick door shutter made of solid PVC foam profile. The styles & rails shall be of size 75 mm x 30 mm having				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		wall thickness 5 mm. The styles, top & bottom rails shall have one side wall thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power. The styles and rails shall be reinforced with M.S. tubes of size 33 mm x 17 mm x 1 mm, painted with primer, all four corners of reinforcement to be welded or sealed. Solid PVC extruded bidding (push fit type) will be set inside the styles and the rails with a cavity, to receive single piece extruded 5 mm PVC sheet as panel. The styles and rails will be mitred cut and joint with the help of PVC solvent cement & self tapping screws. Single piece extruded solid PVC lock rail of size 100 mm x 30 mm with wall thickness 5 mm & 15 mm integrally extruded in the middle of the lock rail & fixed with styles with the help of PVC solvent cement & self tapping screws of size 100 mm x 8 mm complete as per manufacturer's specifications and direction of Engineer-in-charge.				
60 a	9.124.1	Non decorative finish.	233.00	SQM	2609.55	608025.15

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
60 b	9.124.2	Decorative finish (both side wood grained finish).	76.00	SQM	3050.90	231868.40
61	10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size, with top and bottom rail of T-iron 40x40x6mm, with 40mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	152.00	SQM	4234.25	643606.00
62	10.5	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
	10.5.1	Using M.S. angels 40x40x6 mm for diagonal braces.	90.00	SQM	2549.13	229421.70
63	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 50x25mm, or base ties of				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		1.60 mm pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges, 2.5mm 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:				
63 a		Profile B				
	10.14.1.1	Fixing with adjustable lugs with split end tail to each jamb.	2762.00	Metre	346.75	957723.50
63 b		Profile C				
	10.14.2.1	Fixing with adjustable lugs with split end tail to each jamb.	5665.00	Metre	370.00	2096050.00
64	10.18	Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S. sheet box by means of 3.3mm dia. round headed screws, one lock at the corners. Clamp shall be made of 12mm dia M.S. bar bent to shape as per standard drawing.	468.00	No.	117.45	54966.60

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
65	10.25	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
65 a	10.25.1	In stringers, treads, landings etc. of stair cases including use of chequered plate wherever required, all complete.	1.00	MT	67200.00	67200.00
65 b	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	32.00	MT	77900.00	2492800.00
66	10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer.				
	10.26.1	M.S. tube.	3.00	MT	86450.00	259350.00
67	11.10	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31mm thick cement concrete 1:2:4 (1 cement : 2coarse sand : 4 graded stone aggregate 12.5mm nominal size) and to player 9mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4mm to 7mm nominal size laid in				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume including cement slurry etc. complete.				
	11.10.2	Light shade pigment with white cement.	674.00	SQM	462.52	311738.48
68	11.12	Marble chips skirting (up to 30 cm height) rubbed and polished to granolithic finish, top layer 6 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume :				
		18 mm thick with under layer 12 mm thick in cement plaster 1:3 (1 cement : 3 coarse sand) :				
	11.12.1.2	Light shade pigment with white cement.	95.00	SQM	590.14	56063.30
69	11.13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.				
	11.13.1	40 mm wide and 4 mm thick.	674.00	Metre	29.40	19815.60

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
70	11.15	Crazy marble stone flooring, including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black or white and black marble chips of sizes from 1mm to 4mm nominal size by volume), with under layer 25mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4graded stone aggregate 12.5 mm nominal size), including rubbing, polishing and cement slurry etc. complete :				
	11.15.1	18 mm thick crazy marble stone white, black or as specified.	1021.00	SQM	654.21	667948.41
71	11.23	Marble stone flooring with 18mm thick marble stone (sample of marble shall be approved by Engineer-in-charge) over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing complete with :				
71 a	11.23.2	Raj Nagar plain.	273.00	SQM	1186.88	324018.24
71 b	11.23.4	Black Zebra.	186.00	SQM	1086.68	202122.48
71 c	11.23.5	Udaipur green marble	57.00	SQM	1340.48	76407.36

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
72	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.	1257.00	SQM	859.11	1079901.27
73	11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	132.00	SQM	874.30	115407.60
74	11.31	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	1243.00	Metre	52.45	65195.35
75	11.32	Extra for Kota stone/ sand stone in treads of steps and risers using single length up to 1.05 metre .	1293.00	SQM	12.10	15645.30

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
76	11.36	Providing and fixing Ist 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.	2320.00	SQM	652.12	1512918.40
77	11.37	Providing and laying Ceramic glazed floor tiles 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 : 4Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	622.00	SQM	692.42	430685.24

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
78	11.44	Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm, mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement, all complete as per direction of Engineer-in-charge.	2455.00	SQM	309.73	760387.15
79	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	99.00	SQM	1267.07	125439.93

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
80	12.16.1	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusa @ 35 kg per cum of earth and gobri leaping with mix 1:1 (1clay : 1 cow dung) and covered with flat tile bricks, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral waterproofing compound by weight of cement and finished neat :				
	12.16.1	With common burnt clay F.P.S.(non modular) brick tile of class designation 10.	5025.00	SQM	357.60	1796940.00
81	12.18	Extra for every additional thickness of 1 cm of mudphaska *	5025.00	SQM	8.65	43466.25
		*(Average increase in thickness will be 2 cm)				
82	12.21.1	Providing gola 75 x 75 mm in cement concrete 1:2:4 (1 cement :2 coarse sand: 4 Stone aggregate 10 mm and down gauge) including finishing with cement mortar 1:3 (1 cement: 3 Fine sand) as per standard design:	2198.00	Metre	91.05	200127.90

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
83	12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm 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.	153.00	Each	113.90	17426.70
84	12.41.2	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.(i)Single socketed pipes.				
	12.41.2	110 mm diameter	786.00	Metre	206.90	162623.40
85	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.				
85 a	12.42.1	Coupler				
	12.42.1.2	110mm	132.00	Each	130.25	17193.00

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
85 b	12.42.4	Single tee without door				
	12.42.4.2	110x110x110 mm	126.00	Each	241.65	30447.90
85 c	12.42.5	Bend 87.5°				
	12.42.5.2	110 mm bend	182.00	Each	156.95	28564.90
85 d	12.42.6	Shoe (Plain)				
	12.42.6.2	110 mm Shoe	71.00	Each	287.05	20380.55
86	12.43	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50mm hardwood 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	767.00	Each	144.60	110908.20
87	12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	153.00	Each	32.75	5010.75
88	12.47.1	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch including fixing with polymer coated 'J' or 'L'hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigis				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		incorporating minimum 0.3% Ultra-violet stabiliser in resin system under approximately 2400psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. Thesheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.				
	12.47.1	2mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6") as specified.	317.00	SQM	932.50	295602.50
89	13.5	15 mm cement plaster on rough side of single or half brick wall of mix :				
	13.5.2	1:6 (1 cement: 6 coarse sand)	22047.00	SQM	115.48	2545987.56
90	13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) finished with a top layer 6mm thick cement plaster 1:6 (1 cement: 6 fine sand).	14501.00	SQM	146.31	2121641.31
91	13.16	6 mm cement plaster of mix :				
	13.16.1	1:3 (1 cement: 3 fine sand)	6462.00	SQM	79.51	513793.62
92	13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
	13.47.1	New work (Two or more coats applied @ 1.43 ltr/ 10 sqm. over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm).	14501.00	SQM	80.45	1166605.45
93	13.67	Varnishing with varnish of approved brand and manufacture:				
	13.67.1	Two or more coats of glue sizing with copal varnish over an under coat of flatting varnish.	5347.00	SQM	80.60	430968.20
94	13.68	French spirit polishing :				
	13.68.1	Two or more coats on new works including a coat of wood filler.	149.00	SQM	137.45	20480.05
95	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	35116.00	SQM	76.05	2670571.80
96	13.81	Distempering 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.	19548.00	SQM	34.40	672451.20

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
97	13.83	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre. of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
	13.83.2	Two coats.	6844.00	SQM	61.45	420563.80
98	13.84	Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
	13.84.2	Two coats.	16117.00	SQM	53.90	868706.30
99	13.85	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
99 a	13.85.1	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre.	137.00	SQM	27.40	3753.80
99 b	13.85.2	With ready mixed red oxide zinc chromatic on steel /iron works having VOC content less than 250 grams/litre.	5780.00	SQM	24.30	140454.00

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
99 c	13.85.3	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre.	26393.00	SQM	25.55	674341.15
100	16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of fine sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	1678.00	SQM	536.65	900498.70
101	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, including flush pipe, with manually controlled device(handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	85.00	Each	2935.06	249480.10

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
102	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.	32.00	Each	4191.76	134136.32
103	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 :				
103 a	17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.	10.00	Each	1833.83	18338.30
103 b	17.7.2	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap.	90.00	Each	1614.43	145298.70

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
104	17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	34.00	Each	894.70	30419.80
105	17.1	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 :				
		Kitchen sink without drain board				
	17.10.2.1	610x510 mm bowl depth 200 mm.	87.00	Each	3919.78	341020.86
106	17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
		Flexible pipe				
	17.28.2.1	32 mm dia	205.00	Each	65.30	13386.50
107	17.29	Providing and fixing 100 mm sand cast Iron grating for gully trap.	60.00	Each	24.60	1476.00
108	17.35	Providing and fixing soil, waste and vent pipes :				
		100 mm dia.				
	17.35.1.1	Sand cast iron S&S pipe as per IS: 1729.	1502.00	Metre	734.30	1102918.60
109	17.36	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 (1				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		cement : 2 fine sand) in S.C.I./ C.I. Pipes :				
	17.36.2	100 mm dia pipe	385.00	Each	56.00	21560.00
110	17.37	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :				
	17.37.1	For 100 mm dia. Pipe	96.00	Each	109.60	10521.60
111	17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
		100 mm				
	17.38.1.1	Sand cast iron S&S as per IS - 1729	121.00	Each	310.30	37546.30
112	17.39	Providing and fixing plain bend of required degree.				
		100 mm				
	17.39.1.1	Sand cast iron S&S as per IS - 1729	107.00	Each	267.30	28601.10
113	17.40	Providing and fixing heel rest sanitary bend				
		100 mm dia				
	17.40.1.1	Sand cast iron S&S as per IS - 1729	32.00	Each	301.00	9632.00

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
114	17.59	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter :				
	17.59.1	100 mm	588.00	Each	58.80	34574.40
115	17.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
115 a		100 mm inlet and 100 mm outlet				
	17.60.1.2	Sand Cast Iron S&S as per IS: 1729.	184.00	Each	637.33	117268.72
115 b		100 mm inlet and 75 mm outlet				
	17.60.2.2	Sand Cast Iron S&S as per IS- 1729.	201.00	Each	561.83	112927.83
116	17.61	Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :				
	17.61.1	100 mm dia.	100.00	Metre	225.49	22549.00

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
117	17.72	Providing and fixing PTMT towel ring trapezoidal shape 215mm long, 200mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour. Weighing not less than 88 gms.	116.00	Each	169.85	19702.60
118	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.	116.00	Each	415.20	48163.20
119	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 300gms.	116.00	Each	452.35	52472.60
120	18.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall				
120 a	18.4.2	PN - 16 Pipe, 20 mm OD	7.00	Metre	131.87	923.09
120 b	18.4.3	PN - 16 Pipe, 25 mm OD	335.00	Metre	176.22	59033.70
120 c	18.4.4	PN - 16 Pipe, 32 mm OD	1299.00	Metre	258.12	335297.88
121	18.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work including cutting and making good the walls etc.,				
121 a	18.5.2	PN - 16 Pipe, 20 mm OD	655.00	Metre	212.32	139069.60
121 b	18.5.3	PN - 16 Pipe, 25 mm OD	57.00	Metre	265.17	15114.69
121 c	18.5.4	PN - 16 Pipe, 32 mm OD	22.00	Metre	362.72	7979.84
122	18.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. : Internal				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		work – Exposed on wall.				
122 a	18.10.4	32 mm dia. nominal bore	29.00	Metre	295.92	8581.68
122 b	18.10.5	40 mm dia. nominal bore	44.00	Metre	363.52	15994.88
122 c	18.10.6	50 mm dia. nominal bore	333.00	Metre	453.07	150872.31
123	18.11	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps i/c making good the walls etc. concealed pipe including painting with anticorrosive bitumastic paint, cutting chases and making good the wall				
	18.11.1	15 mm dia nominal bore	31.00	Metre	224.77	6967.87
124	18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				
124 a	18.12.2	20 mm dia. nominal bore	62.00	Metre	161.25	9997.50
124 b	18.12.6	50 mm dia. nominal bore	55.00	Metre	355.95	19577.25
124 c	18.12.7	65 mm dia. nominal bore	70.00	Metre	453.55	31748.50
125	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 :				
125 a	18.13.1	25 to 40 mm nominal bore	31.00	Each	277.35	8597.85
125 b	18.13.2	50 to 80 mm nominal bore	5.00	Each	630.15	3150.75
126	18.14	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of	28.00	Each	228.55	6399.40

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		water meter and stop cock to be paid separately).				
127	18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
127 a	18.17.1	25 mm nominal bore	55.00	Each	372.95	20512.25
127 b	18.17.2	32 mm nominal bore.	1.00	Each	450.90	450.90
127 c	18.17.4	50 mm nominal bore	4.00	Each	780.60	3122.40
127 d	18.17.5	65 mm nominal bore	1.00	Each	1073.25	1073.25
128	18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
128 a		32 mm nominal bore				
	18.19.2.1	Horizontal	7.00	Each	490.25	3431.75
128 b		50 mm nominal bore				
	18.19.4.1	Horizontal	5.00	Each	936.35	4681.75
129	18.21	Providing and fixing uplasticised PVC connection pipe with brass unions :				
		45 cm length				
	18.21.2.1	15 mm nominal bore	276.00	Each	61.70	17029.20
130	18.22	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :				
	18.22.2	150 mm diameter	10.00	Each	77.85	778.50
131	18.40	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
131 a	18.40.2	20 mm dia. nominal bore	62.00	Each	5.15	319.30
131 b	18.40.6	50 mm dia. nominal bore	55.00	Each	10.55	580.25
131 c	18.40.7	65 mm dia. nominal bore	70.00	Each	12.95	906.50

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
132	18.41	Providing and filling sand of grading zone V or coarser grade all-round the G.I. pipes in external work.				
132 a	18.41.2	20 mm dia. nominal bore	62.00	Each	55.50	3441.00
132 b	18.41.6	50 mm dia. nominal bore	55.00	Each	61.40	3377.00
132 c	18.41.7	65 mm dia. nominal bore	70.00	Each	96.95	6786.50
133	18.46	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)				
133 a	18.46.2	20 mm nominal bore	31.00	Each	142.85	4428.35
133 b	18.46.4	32 mm nominal bore	31.00	Each	189.30	5868.30
133 c	18.46.5	40 mm nominal bore	4.00	Each	229.95	919.80
133 d	18.46.6	50mm nominal bore	4.00	Each	307.70	1230.80
133 e	18.46.7	65 mm nominal bore	1.00	Each	551.60	551.60
134	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	69250.00	Ltr	6.10	422425.00
135	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931				
	18.49.1	15 mm nominal bore.	116.00	Each	397.50	46110.00
136	18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		not less than 810gms.				
	18.50.1	15 mm nominal bore.	195.00	Each	411.40	80223.00
137	18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690gms.				
	18.51.1	15 mm nominal bore	148.00	Each	430.60	63728.80
138	18.52	Providing and fixing C.P. brass concealed COCK of standard design and of approved make conforming to IS:8931.				
	18.52.1	15 mm nominal bore.	180.00	Each	426.55	76779.00
139	18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore				
	18.53.1	15mm nominal bore	343.00	Each	449.35	154127.05
140	18.54	Providing and fixing PTMT bib cock of approved quality and colour.				
	18.54.3	15 mm nominal bore, 165mm long. Weighing not less than 110 gms.	85.00	Each	199.80	16983.00
141	18.58	Providing and fixing PTMT grating of approved quality and colour.				
		Circular type.				
141 a	18.58.1.2	125 mm nominal dia with 25 mm waste hole.	255.00	Each	50.15	12788.25
		Rectangular type with openable circular lid.				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
141 b	18.58.2.1	150 mm nominal size square 100 mm diameter of the inner hinged round grating.	305.00	Each	124.50	37972.50
142	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 dia	4.00	Each	4018.15	16072.60
143	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.	54.00	Each	543.65	29357.10
144	18.64	Providing and fixing PTMT swiveling shower, 15mm nominal bore. Weighing not less than 40gms.	106.00	Each	112.75	11951.50
145	18.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.				
	18.75.3	25mm nominal bore. Weighing not less than 62 gms.	162.00	Each	72.05	11672.10
146	19.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand)				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		including testing of joints etc. complete :				
	19.1.2	150 mm diameter	726.00	Metre	200.47	145541.22
147	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:				
	19.2.2	150 mm diameter S.W. pipe	363.00	Metre	471.22	171052.86
148	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 :				
		150 x 100 mm size P type.				
	19.4.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	31.00	Each	1129.00	34999.00
149	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 :				
	19.6.2	150 mm dia. R.C.C. pipe	736.00	Metre	251.02	184750.72

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
150	19.7	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2coarse 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 (1cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
		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	86.00	Each	5365.91	461468.26
151	19.8	Extra for depth for manholes				
		Size 90x80 cm				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
	19.8.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	54.00	Metre	3329.95	179817.30
152	19.15	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :				
	19.15.2	With 20 mm diameter round bar	54.00	Each	188.77	10193.58
153	19.21	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :				
	19.21.1	For pipes 100 to 250 mm diameter	9.00	Each	242.48	2182.32

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
154	19.22	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all-round with cement concrete 1:5:10 (1 cement : 5 fine sand :10 graded stone aggregate 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brickwork in cement mortar 1:4 (1 cement : 4 coarse sand) plastered with cement mortar 1:3 (1 cement : 3 coarse sand) on inside of the manhole wall, lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine sand) joints between sand cast-iron tee and S.W. pipe, making required channels complete as per standard design and specifications :				
	19.22.2	150 mm dia. sand cast iron drop connection	2.00	Each	6508.30	13016.60
155	19.23	Extra for depths beyond 60 cm of sand cast iron drop connection complete :				
	19.23.2	For 150 mm dia. sand cast iron drop connection	2.00	Metre	2016.60	4033.20

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
156	19.26	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required(Raising depth of manhole to be paid separately) :				
	19.26.3	Rectangular manhole 120x90 cm with circular cover 560 mm dia of grade HD - 20	4.00	Each	1859.40	7437.60
157	19.27	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
	19.27.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	35.00	Each	2674.90	93621.50
158	19.30	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:2:4 mix (1 cement				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		:2 coarse sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10graded 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 :				
		Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :				
	19.30.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	57.00	Each	3923.28	223626.96
159	19.31	Extra for depth beyond 45 cm of brick masonry chamber :				
		For 500x700 mm size				
	19.31.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	30.00	Metre	2529.99	75899.70

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
160	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, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
160 a	21.1.1	For fixed portion				
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	542.00	Kg	387.70	210133.40

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
160 b	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)	446.00	Kg	436.35	194612.10
161	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):				
161 a	21.3.2	With float glass panes of 5.50 mm thickness	64.00	SQM	905.75	57968.00
162	21.11	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
	21.11.1	205 X 19 mm	10.00	Each	205.40	2054.00

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
163	21.12	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.				
	21.12.2	Powder coated minimum thickness 50 micron aluminium tubular handle bar.	10.00	Each	544.40	5444.00
164	21.15	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.				
	21.15.2	Powder coated minimum thickness 50 micron aluminium.	10.00	Each	51.70	517.00
165	22.4	Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete :				
	22.4.1	Serrated with central bulb (225mm wide, 8-11mm thick).	69.00	Metre	459.15	31681.35

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
166	22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with waterproofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	659.16	SQM	208.01	137111.87
167	22.19	Providing and laying 3 mm thick APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same	5025.00	SQM	374.25	1880606.25

CONTRACTOR

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		<p>membrane manufactured of density at 25°C, 0.87 - 0.89 kg/ltr and viscosity 70 -160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C.Cold flexibility shall be upto - 2°C when tested in accordance with ASTM,D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :</p>				
PART B		ELECTRICAL WORKS				
168	1.10	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 modular switch, modular plate, suitable GI box				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.				
168 a	1.10.1	Group A	1276	Point	462.00	589512.00
168 b	1.1.2	Group B	189	Point	716.00	135324.00
168 c	1.10.2	Group B	420	Point	554.00	232680.00
169	1.11	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, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.	209	Point	710.00	148390.00
170	1.12	Wiring for light/ power plug with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	5643	Metre	162.00	914166.00
171	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/				

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		recessed medium class PVC conduit as required				
171 a	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	4770	Metre	107.00	510390.00
171 b	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	4834	Metre	162.00	783108.00
171 c	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	1575	Metre	206.00	324450.00
171 d	1.14.10	4 X 10 sq. mm + 2 X 10 sq. mm earth wire	5784	Metre	562.00	3250608.00
171 e	1.14.11	4 X 16 sq. mm + 2 X 16 sq. mm earth wire	25	Metre	789.00	19725.00
172	1.18	Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.3	4 Pair	3180	Metre	24.00	76320.00
173	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	3995	Metre	22.00	87890.00
174	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
174 a	1.21.1	20 mm	3155	Metre	56.50	178257.50

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
174 b	1.21.2	25 mm	3165	Metre	64.50	204142.50
174 c	1.21.3	32 mm	933	Metre	80.50	75106.50
175	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.				
	1.22.3	150 mm X 75 mm X 60 mm deep	112	Each	92.50	10360.00
176	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
176 a	1.24.1	5/6 amps switch	962	Each	75.00	72150.00
176 b	1.24.3	15/16 amp switch	539	Each	109.00	58751.00
176 c	1.24.4	3 pin 5/6 amp socket outlet	962	Each	96.00	92352.00
176 d	1.24.5	6 pin 15/16 amp socket outlet	587	Each	147.00	86289.00
176 e	1.24.6	Telephone socket outlet	102	Each	89.00	9078.00
176 f	1.24.7	TV antenna socket outlet	179	Each	93.00	16647.00
176 g	1.24.8	Bell push	93	Each	98.50	9160.50
177	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	343	Each	322.00	110446.00
178	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box	580	Each	22.00	12760.00

CONTRACTOR

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		excluding modular plate as required.				
179	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.	0		0.00	0.00
179 a	1.27.1	1 or 2 Module (75mmX75mm)	722	Each	142.00	102524.00
179 b	1.27.2	3 Module (100mmX75mm)	1072	Each	154.00	165088.00
179 c	1.27.4	6 Module (200mmX75mm)	304	Each	221.00	67184.00
180	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	755	Each	366.00	276330.00
181	1.33	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	719	Each	34.00	24446.00
182	1.34	Supplying and fixing brass batten/ angle holder including connection etc. as required.	889	Each	63.00	56007.00
183	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	93	Each	54.50	5068.50

CONTRACTOR

ACCEPTING OFFICER (BHEL)

Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
184	1.39	Providing and fixing plain 16/0.20mm (0.50sqmm) twin flat flexible, FR PVC insulated, copper cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required.	1097	Metre	19.00	20843.00
185	1.41	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	484	Each	69.50	33638.00
186	1.44	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required.	343	Each	73.50	25210.50
187	1.49	Numbering of ceiling fan/ exhaust fan/ fluorescent fittings as required.	1065	Each	19.50	20767.50
188	1.50	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	104	Each	163.00	16952.00

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
189	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	104	Each	68.50	7124.00
190	2.7	Supplying and fixing following way prewired SP&N MCB distribution board of steel sheet for 240 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required. (But without MCB/ RCCB/ Isolator)				
	2.7.3	2 + 12 way, Single door	70	Each	2394.00	167580.00
191	2.8	Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate,				

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				
191 a	2.8.2	6 way (4 + 18), Single door	30	Each	7155.00	214650.00
191 b	2.8.3	8 way (4 + 24), Single door	4	Each	8188.00	32752.00
191 c	2.8.4	12 way (4 + 36), Single door	1	Each	10059.00	10059.00
192	2.10	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.				
192 a	2.10.1	Single pole	1164	Each	141.00	164124.00
192 b	2.10.5	Triple pole and neutral	44	Each	723.00	31812.00
193	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
193 a	2.14.1	25 amps	90	Each	1318.00	118620.00

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
193 b	2.14.2	40 amps	43	Each	1394.00	59942.00
194	2.15	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 mill amperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.15.3	63 amps	3	Each	1965.00	5895.00
195	2.18	Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	57	Each	693.00	39501.00
196	NS	Providing of Prewired fluorescent fitting/compact fluorescent light fitting surface type store enameled control gear duly wired complete with electronic choke, rotor, starter, starter holder, condenser, lamp/tube light end plates/retainers etc. ready to use complete as				

CONTRACTOR

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Item No.	DSR 2012 CODE	Description of Work	Quantity	Unit	Rate (Rs.) (excluding cost of free issue material)	Amount (Rs.)
		required.				
196 a		1 x28 watt T5 Surface/Pendant Mounting Lamp Luminaire PVC Body Channel with Reflector	484	Each	800.00	387200
196 b		1 x 25 watt CFL Tube	248	Each	202.00	50096
197	NS	Supply of white colour blade ceiling fan of following sizes capacitor type complete with down rod canopies hanging shackles, blades, without regulator suitable for use on 220/240 volts 50 Hz single phase A.C. Supply conforming to IS 374/1979.				
		1200 mm sweep	343	Each	1257.00	431151
198	NS	Supply of metal blade Light duty Exhaust fan 300 mm sweep double bearings complete with louvers, mounting ring, blades etc. complete as required.	0			
		250 mm sweep	104	Each	1086.00	112944
<u>TOTAL AMOUNT (Rs.)</u>			9,72,69,123.00 (Rupees Nine Crore Seventy Two Lakh Sixty Nine Thousand One Hundred Twenty Three Only)			

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IMPORTANT NOTES:

- **RATES STIPULATED ABOVE IN TABLE 1 ARE BASED OVER CPWD DSR 2012 FOR SCHEDULED ITEMS AND MARKET RATES FOR NON SCHEDULED ITEMS AND EXCLUDES COST OF PORTLAND CEMENT AND REINFORCEMENT STEEL WHICH SHALL BE ISSUED BY BHEL TO THE CONTRACTOR FREE OF COST AT BHEL STORES.**
- **SERVICE TAX AS APPLICABLE SHALL BE EXTRA TO THE RATES STIPULATED ABOVE .CESS UNDER 'BOCW ACT 1996' SHALL BE EXTRA TO THE RATES STIPULATED ABOVE.**
- **ESTIMATED COST OF FREE ISSUE MATERIAL IS Rs. 14,997,799.00**
- **FOR THE INCLUSIONS AND EXCLUSIONS IN THE RATES TO BE QUOTED BY BIDDERS IN TABLE 2 BELOW REFERENCE OF RELEVANT CLAUSES OF SPECIAL CONDITIONS OF CONTRACT, GENERAL CONDITIONS OF CONTRACT, TECHNICAL CONDITIONS OF CONTRACT AND INSTRUCTIONS TO THE TENDERERS AND NIT COVER LETTERS AS DESCRIBED IN PART1 OF TENDER DOCUMENT SHALL BE TAKEN.**
-

TABLE 2

<u>BIDDERS OFFER</u>			
<u>A</u>	BASIC RATES OVER STIPULATED RATES/BELOW/ABOVE/AT PAR (QUOTE IN ANY ONE OF (1) ,(2) ,(3) ONLY)	BASIC AMOUNT (Rs.) IN FIGURE	BASIC AMOUNT (Rs.) IN WORDS
(1)% BELOW OVER RATES AS STIPULATED ABOVE IN TABLE 1 FOR ALL ITEMS OF WORK	TOTAL AMOUNT (Rs.) IN FIGURES 	TOTAL AMOUNT (Rs.) IN WORDS
(OR)			
(2)% ABOVE OVER RATES AS STIPULATED ABOVE IN TABLE 1 FOR ALL ITEMS OF WORK	TOTAL AMOUNT (Rs.) IN FIGURES 	TOTAL AMOUNT (Rs.) IN WORDS

CONTRACTOR**ACCEPTING OFFICER (BHEL)**

(OR)			
(3)	<p>.....AT PAR OVER RATES AS STIPULATED ABOVE IN TABLE 1FOR ALL ITEMS OF WORK</p>	<p>TOTAL AMOUNT (Rs.) IN FIGURES</p> <p>.....</p>	<p>TOTAL AMOUNT (Rs.) IN WORDS</p> <p>.....</p>
(B)	<p>ADD SERVICE TAX INCLUDING CESS COMPLETE AT THE RATE OF</p> <p>.....% OF.....</p>	<p>TOTAL SERVICE TAX AMOUNT (Rs.) IN FIGURES</p> <p>.....</p>	<p>TOTAL SERVICE TAX AMOUNT (Rs.) IN WORDS</p> <p>.....</p>
(C)	<p>GROSS AMOUNT QUOTED INCLUDING SERVICE TAX (Rs.) (Sum of A & B)</p>	<p>IN FIGURES</p> <p>.....</p>	<p>IN WORDS</p> <p>.....</p>

CONTRACTOR

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SCHEDULE 'B'

THE FOLLOWING MATERIALS WILL BE ISSUED FREE OF COST TO CONTRACTOR
FOR EXECUTION OF WORK AT BHEL STORE

SL.NO.	DESCRIPTION	PLACE OF ISSUE
1	PORTLAND CEMENT(GREY)	BHEL STORE
2	REINFORCEMENT BARS	BHEL STORE

- 1 It will be the responsibility of the Contractor to submit his demands for the above stores in writing at least seven days in advance of the actual requirement.
- 2 Issue of Stores is subject of the availability at the place of issue cited above, items of stores to be issued by BHEL which are not available at the time of indenting by the contractor may be supplied by BHEL after necessary procurement. The contractor shall not be entitled to any claim of compensation for delay in the supply of stores by BHEL under any circumstances.
- 3 The materials will be issued only during the working hours of the BHEL Store Department (9.00 a.m. to 5:30 p.m.). Contractor shall have to transport them as soon as they are issued to him to the site of work at his own cost.
- 4 The steel materials if issued will be in random lengths and sizes as stocked by the BHEL and the cost of all cutting, conversion, substitution and fabrication as well as wastage shall have to be borne by the Contractor.
- 5 The contractor shall from time to time render proper account of all materials issued to him by BHEL. If he fails to do so, no further issue of materials will be made to him and he will be held responsible for any delay in the execution of the work which may occur on this account.
- 6 All surplus materials in good condition which are not returned to the BHEL Stores as also quantities of materials consumed in excess of the max. Permissible limit as fixed by BHEL shall be charged for at punitive rates.
- 7 The decision of the Engineer / Dy. General Manager / Manage as to the extent to which materials have been rendered surplus or consumed in excess of the actual requirements shall be final and conclusive and binding on the contractor.

CONTRACTOR

ACCEPTING OFFICER (BHEL)

SCHEDULE 'C'**ISSUE OF TOOLS AND PLANTS TO BE ISSUED BY BHEL TO
CONTRACTOR FOR EXECUTION OF CONTRACT WORK**

Sl.No.	Qty.	Particulars	Details of BHEL Crew Supplied	Hire Charges Per unit Per Day	Place of Issue	Remarks
.....NIL.....						

a. Machineries shall not be operated over time without the written permission of the Sr. Engineer / Dy. Manager / Manager.

b. All Coolies, Watermen etc., required in addition to BHEL crew mentioned in column 4 above shall be arranged by the architect / consultant at his own expense.

CONTRACTOR

ACCEPTING OFFICER (BHEL)

SCHEDULE 'D'

NOTE: Following Drawings shall be issued by BHEL to Contractor during the execution of work and good for constructions.

SL.No.	DESCRIPTION
1	SITE LAYOUT
2	PLAN & ELEVATION
3	REINFORCEMENT DETAILING
4	DETAIL DRAWINGS OF SECTIONAL ELEVATIONS
5	DOOR AND WINDOW SCHEDULES
6	WATER SUPPLY, SANITATION AND DRAINAGE DETAIL DRAWINGS
7	FLOORING, FINISHING AND WATERPROOFING DETAIL DRAWINGS
8	ELECTRICAL INSTALLATION DETAIL DRAWINGS

CONTRACTOR**ACCEPTING OFFICER (BHEL)**

SCHEDULE 'E'

LEAD STATEMENT

-----NA-----

CONTRACTOR

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