

BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM :: HYDERABAD-502032

(TOWNSHIP ADMINISTRATION)

Price Bid - Part - B - Item No.02

Tender Notice No:
HY/TA/OT-13/2014-15
Date: 27.01.2014, Item No. 02

Part A: Renovation of Wash rooms in General Hospital in the following locations-Ladies & Gents wash rooms in OPD area, Pathology lab area, Lab & Medical stroes, Surgical area.

1) CIVIL WORKS

Sl. No	Description of item	Qty	Unit	Rate	Amount
1	Dismantling door windows and clerestory windows (steel or wood) quantity of stacks of cleaned material will be measured) ,Of area less than 3sqm	60.00	no	54.60	3,276.00
2	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50mtr lead	932.00	Sqm	8.20	7,642.40
3	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge, In cement mortar	4.75	Cum	310.75	1,476.06
4	Demolishing RCC work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge.	8.00	Cum	537.55	4,300.40
5	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern with fitting standard size CP brass flush pipe spreaders with unions and clamps (all in CP brass) with waste fitting as per IS 2556 CI trap with outlet grating and other couplings in CP brass including painting of fitting and cutting and making good the walls and floors wherever required, Single half stall urinal with 5 ltr PVC automatic flushing cistern	28	No	3,693.64	1,03,422.02
6	Providing and fixing wash basin with CI brackets 15mm CP brass pillar taps 32mm CP brass waste of standard pattern including painting of fittings and brackets cutting and making good the walls wherever require, White vitreous china wash basin size 550x400mm with a pair of 15mm CP brass pillar tap	14.00	No	1,163.03	16,282.46
7	Providing and fixing white vitreous china pedestal type water closet (european type WC pan) with seat and lid 10ltr low level white PVC flushing cistern with manually controlled decice (handle level) conforming to IS 7231 with all fittings and fixtures complete including cutting and making good the wall and floors wherever required, WC pan with ISI marked white solid plastic seat and lid	12.00	No	2,126.37	25,516.40
8	Providing and fixing water closet squatting pan(indian type WC pan) with 100mm sand cast iron P or S trap 10 ltr low level white PVC flushing cistern with manually controlled device (handle level) conforming to IS 7231 with all fitting and fixtures complete including cutting and making good the walls and floors wherever required, White vitreous china orissa pattern WC pan of size 580x440mm with integral type foot rests	11	No	2,278.52	25,063.68
9	Providing and fixing mirror of superior glass (approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing ,Rectangular shape 1500x450mm	16.00	No	1,034.50	16,552.00
10	Brick work FPS brick of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in ,cement mortar 1:6(1cement :6 coarse sand)	16.50	Cum	2,030.73	33,507.01
11	20mm cement plaster of mix 1:6(1 cement 6 fine sand)	951.00	Sqm	65.83	62,604.52
12	12mm cement plaster 1:3 (1cement 3 coarse sand) finished with a floating coat of neat cement.	127.00	Sqm	62.94	7,992.97
13	Providing and fixing factory made UPVC door frame made of UPVC extruded section having an overall dimensions as below (tolerance - ⁺¹ mm) with wall thickness 2.0mm - ^{+0.2} mm, corners of the door frame to be mitred and welded of pastic, galvanized brackets and stainless steel screws . the hinges side vertical of the frames reinforced by galvanized stainless steel hinges fixed to the frame complete as per manufactures specification and direction of engineer in charge, Extruded section profile size 48x40mm	100.00	RMT	141.00	14,100.00

14	24mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24mm and wall thickness 2mm + 0.2mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of MS 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 MS tube of size 20x20mm and 1mm + 0.1mm wall thickness. the lock rail made up of H section a UPVC hollow section of size 100x24 mm and 2 mm + 0.2mm wall thickness fixed to the shutter styles by means of plastic/ galvanised MS.U cleats. the shutter frame filled with a UPVC multi chambered single panel of size not less than 620 mm having over all thickness of 20mm and 1mm + 0.1mm wall thickness. the panels filled vertically and tie bar at two places by inserting horizontally 6mm galvanised MS rod and fastened with nuts and washers, complete as per manufacture's specification and washers complete as per manufacture's specification and direction of engineer in charge. (for W.C and bathroom door shutter) ,	37.50	Sqm	2,190.50	82,143.75
15	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 teak 3 ply veneering with vertical grains or cross band and face veneers	30	sqm	929.95	27,898.50
16	Supply, fabrication and installation of UPVC framed casement /sliding windows as per standard specification and procedure mentioned by manufacturers. The UPVC profiles of frames and sash shall be mitred cut and fusion welded at all corners, including drilling of hole for fixing hardware and drainage of water etc., making arrangement for fixing hardware, EPDM gasket, with 1.2 ± 0.2 mm thick galvanized steel profile to be inserted in required profile, frame shall be fixed to the wall with 8 mm X100 mm long fasteners, all complete as per direction of Engineer-In-Charge. All screws to be used shall be of S.S. of make as approved by Engineer-In-Charge. The Top hung outside opening casement Double glazed window shall consist mainly of:- i. Casement frame of size 67 mm X 62 mm ii. Casement window sash/Mullion (67 mm X 75 mm) iii. Casement glazing bead (35 mm X 18 mm) IV. S. S. -304 grade, friction hinges of size 250 X19 X 1.9 mm v. Tinted, single glazing of thickness 5.5 mm with necessary gasket. vi. Multi point lock with handle. Make:Fenesta/Aluplast/Lingel/Shuco/Winpro/Rehau/Magnus/other reputed manufacturer Note:-The new windows shall be installed after removing the existing M.S. framed/wooden windows.After installing the new windows proper sealing shall be done by the installer so as to ensure that there is no leakage.	44.25	Sqm	3,811.50	1,68,658.88
17	Supply & fixing "Jaguar" make urinal valve auto closing system with built in control cock & wall flange PRS -007	16.00	No	2,545.34	40,725.44
18	Providing and fixing CP brass bib cock of approved quality conforming to IS 8931: 15 mm nominal bore.	27.00	No	313.10	8,453.70
19	Providing and fixing CP brass pillar cock of approved quality conforming to IS 8931: 15 mm nominal bore.	14.00	No	313.10	4,383.40
20	Providing and fixing CP brass stop cock of approved quality conforming to IS 8931: 15 mm nominal bore.	44.00	No	313.10	13,776.40
21a	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacture) 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 shades complete. (Of make: Somany/ nitco/kajaria/other reputed approved brands)	414	Sqm	491.68	2,03,557.08
21b	Providing and fixing 1st quality granite stone of approved shade to facia and plat forms:Stone tile work for wall lining upto 10 m height with special adhesive over 12mm thick bed of cement mortar 1:3 (1cement : 3 coarse sand) including pointing in white cement with an admixture of pigment to match the stone shade. 8mm thick (mirror polished and machine cut edge)	138.5	Sqm	989.18	1,37,001.81

22	Providing and Distempering with oil bound wasable distemper of approved brand and manufacture to give and even shade New work (two or more coats) over and including priming coat with cement primer.	385	Sqm	41.55	15,996.75
23	Finishing wall with water proofing cement paint (snowcem) of required shade: New work (Two or more coats applied @ 3.84 kg/10 sqm).	240	Sqm	30.80	7,392.00
24	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work	46	Sqm	33.25	1,529.50
25	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 10mm gap for thermal expansion (i) single socketed pipes 75 mm	162.00	RMT	95.00	15,390.00
26	Supply & fixing CI Nahany traps of 76mm(3") st quality ISI Marked Coformring to IS : 1729-1979 with CP Grating fixing with white cement as per site requirement with standards practice 100mm dia inlet 75mm dia outlet.4kgs.	40	No	200.00	8,000.00
27a	Providing and fixing GI pipes complete with GI fitting and clamps including cutting and making good the walls etc 15 mm dia	360	RMT	79.72	28,697.85
27b	Providing and fixing GI pipes complete with GI fitting and clamps including cutting and making good the walls etc 20 mm dia	230	RMT	102.49	23,572.59
27c	Providing and fixing GI pipes complete with GI fitting and clamps including cutting and making good the walls etc 25 mm dia	140	RMT	143.06	20,028.79
28a	Supply & Fixing GM peet valves, as pe IS-778 class -I Indian make heavy type size : 15 MM NB size	33.00	No	242.00	7,986.00
28b	Supply & Fixing GM peet valves, as pe IS-778 class -I Indian make heavy type size : 20 MM NB size	18.00	No	327.00	5,886.00
28c	Supply & Fixing GM peet valves, as pe IS-778 class -I Indian make heavy type size : 25 MM NB size	12.00	No	482.00	5,784.00
2)Electrical works					
1	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 M.S. box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required; complete all as directed by Engr-in-charge.	40.00	Each	619.00	24,760.00
2	Supply and fixing 3-pin, 5 Amps. ceiling rose / PVC batten / angle holder (ISI marked) including connection etc. as required; complete all as directed by Engr-in-charge.	40.00	Each	34.00	1,360.00
3	Supply & wiring for circuit / submain wiring alongwith earth wire with 2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire, all of FR PVC insulated multistranded copper conductor, single core cable in surface/ recessed medium class PVC conduit as required; complete all as directed by Engineer-in-charge.	160.00	Metre	131.00	20,960.00
4	Supply and wiring for light plugs (separate socket) with 2 x 1.5 sq.mm + 1 x 1.5 sq.mm (earth wire) of FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit as required along with Supply and fixing metal box of 150mm X 75mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps piano type switch, connection etc. as required; complete all as directed by Engr-in-charge.	8.00	Each	687.00	5,496.00
5	Supply and fixing of 6 Amps. piano type switch and 3 pin 6 Amps. socket outlet on the existing switch box / cover including connections etc. as required; complete all as directed by Engr-in-charge.	16.00	Each	65.00	1,040.00
6	Supply and fixing suitable size GI box in recess with modular plate and cover in front, including providing and fixing 6-pin 5/6 & 15/16 Amp. socket outlet and 15/16 Amp. modular switch including connections etc . as required; complete all as directed by Engineer-in-charge.	8.00	Each	366.00	2,928.00

7	Supply, installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of makes as mentioned below this schedule, complete with all accessories and lamp 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: complete all as directed by Engineer-in-charge.	20.00	Each	869.50	17,390.00
8	Supply and installation of 225mm (9") sweep light duty exhaust fan of Bajaj / GEC / Crompton Greaves make having propeller type metallic blades and louver shutter. Installation includes cutting of wall in required shape and size manually / by mechanical means and making good the damage etc. The exhaust fan to be mounted properly with foundation bolts grouted to the wall and finished smooth to match the wall. The exhaust fan to be connected with suitable length of 16/0.2mm twin twisted copper cable; complete all as directed by Engineer-in-charge.	16.00	Each	1,579.00	25,264.00
Total Part A (civil + Electrical)					12,47,796.35
Part B: "Renovation of Male / Female Wards.					
1	Dismantling cement motor plastering / stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	215.00	sqm	40.50	8,707.50
2	Demolishing brick work manually/by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar	2.00	cum	310.75	621.50
3	Demolishing C.C. /R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 mtrs lead as per direction of Engineer-in-charge.	1.00	cum	537.55	537.55
4	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in: Cement mortar 1:6 (1 cement : 6 coarse sand)	3.00	cum	2,103.58	6,310.73
5	Plastering in Cement Motor 1:6 with 20 mm cement plaster of mix: 1:6 (1 cement : 6 fine sand)	215.00	sqm	65.83	14,153.49
6	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS:15622 (thickness to be specified by the manufacture) 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.	215.00	sqm	491.68	1,05,712.01
7	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/panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-Charge. (Galzing and penelling to be paid for separately): Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15).	200.00	kgs	290.45	58,090.00
8	Providing and fixing 12mm thick 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 25mm to 40mm thick. Marine plywood of lamination / paiting quality and conforming to IS 710	9.00	sqm	1,186.80	10,681.20

9	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes including black enamelled ISI marked M.S butt hinges with necessary screws. 30 mm thick	22.50	sqm	1,541.65	34,687.13
10	Supply, fabrication and installation of UPVC framed casement /sliding windows as per standard specification and procedure mentioned by manufacturers.The UPVC profiles of frames and sash shall be mitered cut and fusion welded at all corners, including drilling of hole for fixing hardware and drainage of water etc., making arrangement for fixing hardware, EPDM gasket, with 1.2 ± 0.2 mm thick galvanized steel profile to be inserted in required profile, frame shall be fixed to the wall with 8 mm X100 mm long fasteners, all complete as per direction of Engineer-In-Charge. All screws to be used shall be of S.S. of make as approved by Engineer-In-Charge. The Top hung outside opening casement Double glazed window shall consist mainly of:- i. Casement frame of size 67 mm X 62 mm ii. Casement window sash/Mullion (67 mm X 75 mm) iii. Casement glazing bead (35 mm X 18 mm) IV. S. S. -304 grade, friction hinges of size 250 X19 X 1.9 mm v. Tinted, single glazing of thickness 5.5 mm with necessary gasket. vi. Multi point lock with handle. Make:Fenesta/Aluplast/Lingel/Shuco/Winpro/Rehau/Magnus/other reputed manufacturer Note:-The new windows shall be installed after removing the existing M.S. framed/wooden windows.After installing the new windows proper sealing shall be done by the installer so as to ensure that there is no leakage.	54.00	sqm	3,811.50	2,05,821.00
11		144.00	Rmt	0.00	0.00
12	Providing and applying plaster of paris putty / Altek lappam of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	505.00	sqm	47.20	23,836.00
13	Distempering with oil bound wasable distemper of approved brand and manufacture to give an even shade. New work (two or more coats) over and including priming coat with cement primer.	505.00	sqm	41.55	20,982.75
14	Finishing wall with Acrylic Smooth exterior paint of required shade: New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm).	300.00	sqm	50.40	15,120.00
15	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. 75 mm nominal inner dia. Pipes.	48.00	Rm	1,590.75	76,356.00
16	Providing & 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. (make: Mody / Belgium) Rectangular shape 453x357mm	8.00	each	465.10	3,720.80
				Total Part B	5,85,337.66
Part C: "Renovation works of Kitchen in General Hospital."					
1) Civil works					
1	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserveceble material within 50mtr lead	136.00	sqm	40.50	5,508.00
2	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50mtr lead ::For thickness of tiles 10mm to 25mm	115.00	sqm	10.90	1,253.50
3	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge- In cement mortar.	1.80	cum	310.75	559.36

4	Demolishing RCC work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge	2.00	cum	537.55	1,075.10
5	Providing CC 1:2:4 with 20mm metal in layers for platfoms neat finishing curing, cost of all materials	2.00	cum	1,584.89	3,169.78
6	Plastering in CM 1:6, with 20mm thick including neat finishing curing, cost of all materials	115.00	sqm	65.83	7,570.47
7	Providing and applying plaster of paris putty / Altek lappam of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	175.00	sqm	47.20	8,260.00
8a	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished machine cut for kitchen platfoms, 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 (cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edge to give high gloss finish etc. complete at all levels. Granite of any colour and shade of Area of slab over 0.50 sqm.	30.00	sqm	2,513.86	75,415.73
8b	Extra for 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.Granite work.	15.00	rmt	97.60	1,464.00
9	Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete. Size: 60 x 60 cm Tiles in Vendor Scope	203.00	sqm	966.93	1,96,286.79
10	Distempering with dry distemper of approved brand and manufacture (two or more coats) and of required shade on new work, over and including priming coat of whitening to give an even shade. New work (two or more coats) over and including priming coat with cement primer.	175.00	sqm	41.55	7,271.25
11	Providing and fixing to existing door frames. 24 mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59 x 24 mm and wall thickness 2 mm +- 0.2 mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm +- 0.1 mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x24 mm and 2 mm +- 0.2mm wall thickness fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a UPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm +- 0.1 mm wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter).	1.50	sqm	2,190.50	3,285.75
12	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: 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	4.20	sqm	904.40	3,798.48

13	Supply, fabrication and installation of UPVC framed casement /sliding windows as per standard specification and procedure mentioned by manufacturers.The UPVC profiles of frames and sash shall be mitered cut and fusion welded at all corners, including drilling of hole for fixing hardware and drainage of water etc., making arrangement for fixing hardware, EPDM gasket, with 1.2 ± 0.2 mm thick galvanized steel profile to be inserted in required profile, frame shall be fixed to the wall with 8 mm X100 mm long fasteners, all complete as per direction of Engineer-In-Charge. All screws to be used shall be of S.S. of make as approved by Engineer-In-Charge. The Top hung outside opening casement Double glazed window shall consist mainly of:- i. Casement frame of size 67 mm X 62 mm ii. Casement window sash/Mullion (67 mm X 75 mm) iii. Casement glazing bead (35 mm X 18 mm) IV. S. S. -304 grade, friction hinges of size 250 X19 X 1.9 mm v. Tinted, single glazing of thickness 5.5 mm with necessary gasket. vi. Multi point lock with handle. Make:Fenesta/Aluplast/Lingel/Shuco/Winpro/Rehau/Magnus/other reputed manufacturer Note:-The new windows shall be installed after removing the existing M.S. framed/wooden windows.Afterinstalling the new windows proper sealing shall be done by the installer so as to ensure that there is no leakage.	36.00	sqm	3,811.50	1,37,214.00
14		36.00	rmt		
15	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 : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete. (Kajariya / Johnson make).	12.00	sqm	533.73	6,404.81
16	Finishing walls with Acrylic Smooth exterior paint of required shade: New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.20kg/10sqm	183.00	sqm	50.40	9,223.20
17	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:	25.00	sqm	35.35	883.75
18	Providing and fixing PTMT Bottle Trap for Wash basin and sink. Bottle trap 31mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77 mm breadth with 25mm minimum water seal, weighing not less than 260gms.	3.00	Each	366.20	1,098.60
19	Supply & Fixing GI pipes of class-A including cutting threading and jointing with necessary fittings.				
a	15mm dia. Nominal bore	10.00	rmt	79.72	797.16
b	20mm dia (3/4")	80.00	rmt	102.49	8,199.16
c	25mm dia (1")	50.00	rmt	143.06	7,153.14
20	Supply & Fixing GM peet valves, heavy quality of Leader / Zoloto make of the following dia.				
a)	15mm dia (1/2")	3.00	Each	285.50	856.50
b)	20mm dia (3/4")	2.00	Each	285.50	571.00
c)	25mm dia (1")	2.00	Each	358.00	716.00
2)Electrical works					
1	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 M.S. box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required; complete all as directed by Engr-in-charge.	20.00	Each	619.00	12,380.00
2	Supply and fixing 3-pin, 5 Amps. ceiling rose / PVC batten / angle holder (ISI marked) including connection etc. as required; complete all as directed by Engr-in-charge.	20.00	Each	34.00	680.00

3	Supply & wiring for circuit / submain wiring alongwith earth wire with 2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire, all of FR PVC insulated multistranded copper conductor, single core cable in surface/ recessed medium class PVC conduit as required; complete all as directed by Engineer-in-charge.	150.00	Metre	131.00	19,650.00
4	Supply and wiring for light plugs (separate socket) with 2 x 1.5 sq.mm + 1 x 1.5 sq.mm (earth wire) of FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit as required along with Supply and fixing metal box of 150mm X 75mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps piano type switch, connection etc. as required; complete all as directed by Engr-in-charge.	10.00	Each	687.00	6,870.00
5	Supply and fixing of 6 Amps. piano type switch and 3 pin 6 Amps. socket outlet on the existing switch box / cover including connections etc. as required; complete all as directed by Engr-in-charge.	20.00	Each	65.00	1,300.00
6	Supply and fixing suitable size GI box in recess with modular plate and cover in front, including providing and fixing 6-pin 5/6 & 15/16 Amp. socket outlet and 15/16 Amp. modular switch including connections etc. as required; complete all as directed by Engineer-in-charge.	8.00	Each	366.00	2,928.00
7	Supply and fixing 4-way (4+12), Double door, 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; complete all as directed by Engineer-in-charge.	2.00	Each	1,654.00	3,308.00
8	Supplying and fixing 40A rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge.	2.00	Each	554.00	1,108.00
9	Supply and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of single pole in the existing MCB DB complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge.	24.00	Each	141.00	3,384.00
10	Supply, installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of makes as mentioned below this schedule, complete with all accessories and lamp 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; complete all as directed by Engineer-in-charge.	10.00	Each	869.50	8,695.00
11	Supply, installation, testing and commissioning of 1200mm (48") sweep double ball bearing type ceiling fan of Bajaj / GEC / Crompton Greaves make, with all standard accessories, including fan hooks and clamps etc. including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required; complete all as directed by Engineer-in-charge.	4.00	Each	1,884.00	7,536.00
12	Supply and installation of 225mm (9") sweep light duty exhaust fan of Bajaj / GEC / Crompton Greaves make having propeller type metallic blades and louver shutter. Installation includes cutting of wall in required shape and size manually / by mechanical means and making good the damage etc. The exhaust fan to be mounted properly with foundation bolts grouted to the wall and finished smooth to match the wall. The exhaust fan to be connected with suitable length of 16/0.2mm twin twisted copper cable; complete all as directed by Engineer-in-charge.	4.00	Each	1,579.00	6,316.00
13	Supply & installation of earthing comprising of 40 mm dia, 3 mm thick GI pipe buried upto a minimum depth of 4.5 mtrs including excavation of pit and filling the pit with homogenous layers of coke/charcoal, salt & sand etc. as required conforming to IS Standards (IS:3043). The earth pit to be provided with brick masonry chamber with hinged cover and watering arrangement; complete in all respects, as directed by Engineer-in-charge.	2.00	Each	3,385.00	6,770.00

14	Providing and fixing 4.00 mm dia annealed copper wire on surface or in recess for loop earthing as required; complete all as directed by Engineer-in-charge.	40.00	Metre	87.50	3,500.00
15	Dismantling and removal of old wirings and fittings such as switch boards / fans / tube lights / old wire accessories etc. Removed materials to be segregated and to be handed over at stores; as directed by Engineer- in-charge.	1.00	L.S.	2,000.00	2,000.00
Total Part C (Civil+ Electrical)					5,74,460.52
Grand Total of Washrooms, Wards & Kitchen (Part A+ Part B+ Part C) Rs.					24,07,594.53
Tender %	In words				Figures
Excess					
Less					
Estimate					
Notes					
1	A penalty of 0.5% of the gross value of work will be levied for every week's delay of work subject to a maximum penalty of 10%				
2	The tender % age quoted by the contractor shall be inclusive of all taxes and duties other than service tax as applicable from				
3	Service tax if paid by the contractor with respect to this work will be reimbursed by BHEL on production of documentary				
4	All the bills of the contractors will be cleared subject to the production of clearance certificate by the contractors in respect of				
5	The agency shall submit the I.R. clearance certificate for the above work and arrange to get the final bill sent to Finance within				
6	The maintenance period of the work is 03 months . The security deposit will be released after satisfactory completion of the				
7	Cement will be free issued from Departmental Stores.				