

TENDER SPECIFICATION

BHEL: PSSR: SCT: 2152

FOR

**Renovation of BHEL Guest House at Ashok
Nagar, Chennai.**

VOLUME –II

PRICE BID



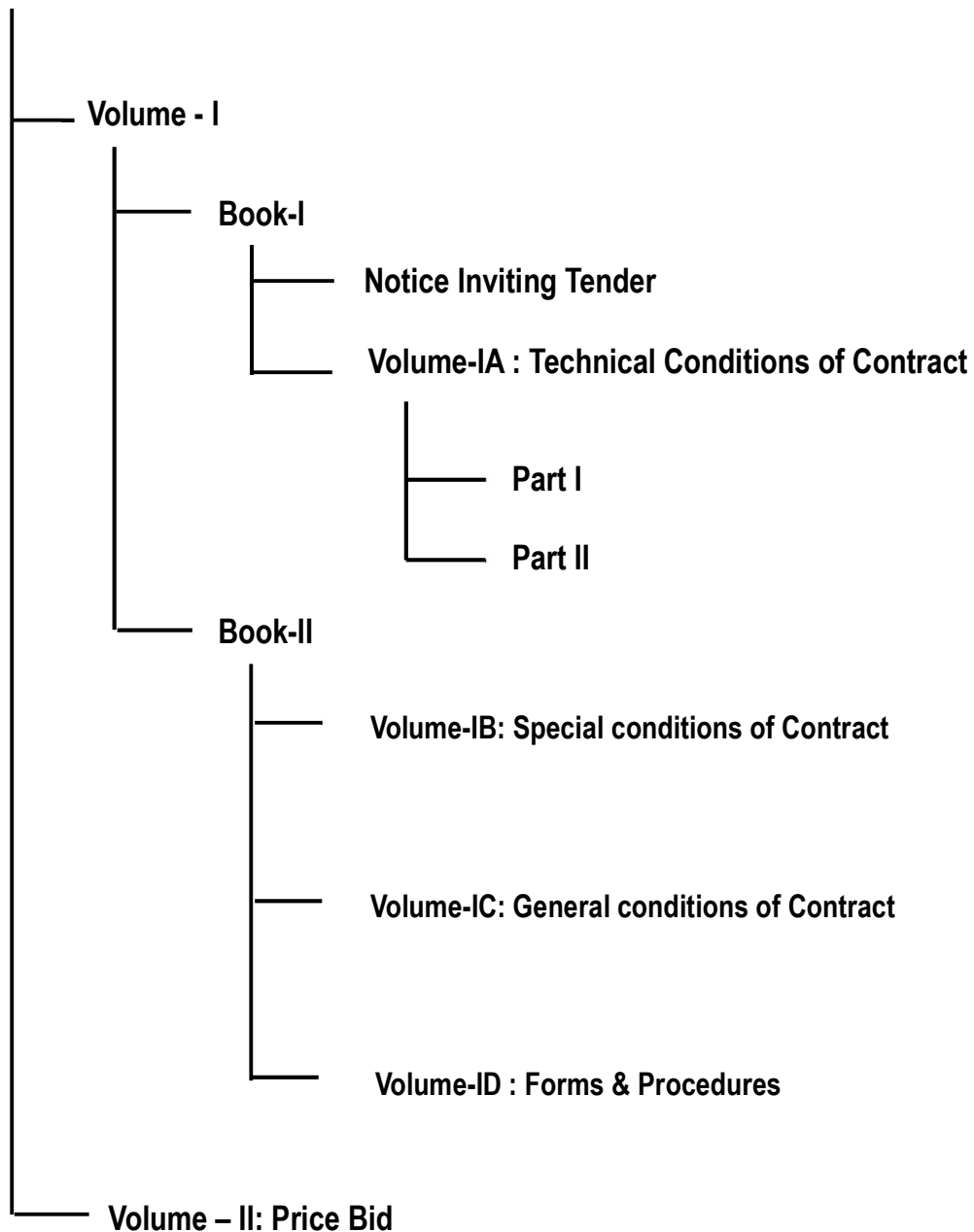
BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)

Power Sector – Southern Region
BHEL Integrated Office Complex, TNEB Road
Pallikaranai, Chennai - 600100

TENDER SPECIFICATION CONSISTS OF

Tender Specification



NOTICE INVITING TENDER

CONTENTS	
Description	No. of pages
Part A: Instructions to the Bidders	01
Part B : Format for total amount (Enclosed as a separate Excel File in BHEL NIC e-Procurement portal for the subject tender)	(Separate Excel File)
Part C: Bill of quantities with weightage for amount of each items with respect to the total quoted price	17

NOTICE INVITING TENDER

PART A

Instruction to Bidders:

1. The quantity indicated in the BOQ / Price bid (Part C) is approximate only and is liable for variation. Payment will be as per actual quantity executed as certified by BHEL Engineer.
2. Tenderers are requested to affix their company seal and authorized signature in all pages.
3. Bidders shall quote 'Total Amount' in the format enclosed as a separate Excel File in BHEL NIC e-Procurement portal for the subject tender and upload the same under 'Packet details - > Tender covers -> Finance '(Cover Type Description – Price Bid)'' and same shall be taken into account for evaluation and awarding and hence, shall be complete in all respect for the full scope of work defined in specification and in accordance with terms & conditions of the tender. Any other entry elsewhere in the price bid shall be treated as Null and Void. Quoting of rates in any other form/ formats will not be entertained.
4. The above mentioned 'Total amount' is for the entire Bill of Quantity (BOQ) given in Part -C of the Price Bid.
5. BHEL has pre-fixed the weightages for the amount of individual items of Bill of Quantity with respect to the 'Total Amount' in Part-C.
6. Based on the pre-fixed weightages, the amount for the individual items of the Bill of Quantity shall be arrived at. This amount shall be rounded off to the nearest rupee.
7. Based on the quantities of individual item and the amount arrived in SI No: 6 above, unit rate of individual items shall be derived. This unit rate shall be rounded off to four decimal places.
8. Bidders to note that this is an item rate contract. Payment shall be made for the actual quantities of work executed at the unit rate arrived at as per SI No.7 above.

Part C : Bill of Quantities

**Tender Specification for Renovation of BHEL Guest House at Ashok Nagar
at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100**

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
1.0	Dismantling, clearing away and carefully stacking materials useful for re-use : Floor finish and dadoing walls in cement mortar with mosaic tiles / glazed tiles / cuddapah slabs	Sqm	550	.0226925
2.0	Dismantling, clearing away and carefully stacking materials useful for re-use : Doors & windows including removal of frames, hinges and fastenings etc.	Sqm	50	.0029471
3.0	Dismantling RCC clearing away and carefully stacking materials	Cum	0.5	.0001474
4.0	Dismantling Brick / stone masonry in Cement mortar walls under 3m high clearing away and carefully stacking materials	Cum	6	.0008488
5.0	Dismantling, clearing away and carefully stacking materials Pressed tiles & weathering course	Sqm	360	.0063657
6.0	Cleaning the surface thoroughly and removing all the impurities and loose plaster of flacks and fungus etc. by suitable mechanical means like scrapping and or wire brushing and subsequently wash with adequate water. All the tiles joints groves will be refilled with pidicrete URP co polymer and acrylic polymer mixed with cement and fine sand mix 1:2:4 fill the surface cracks and apply one coat of acrylic polymer oil prime seal. Later then applying fitting with fiber glass mesh impregnated with 1ton GSM over that apply 2 coats of ROOF hyguard as finish FRP lining complete as directed by the Engineer Incharge.	Sqm	410	.0217494
7.0	Weathering course in brick jelly lime concrete using broken brick jelly of size 20mm uniform gauge in pure slaked lime (no crushed stone sand to be used) to the proportion of brick jelly to lime being 32:12.5 by volume and laid over the RCC roof slab in a single layer of required slope and finished by beating the concrete with wooden beaters of approved pattern, keeping the surface constantly wet by sprinkling lime jaggery water, etc., complete as per standard specification and as directed by the departmental officers.	Cum	57	.030237

Part C : Bill of Quantities

**Tender Specification for Renovation of BHEL Guest House at Ashok Nagar
at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100**

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
8.0	Finishing the top of roof with one course of machine pressed tiles of size 230mm x 230mm x 20mm of approved quality set in Cement Mortar 1:3 (One Cement and Three Crushed stone Sand) 12mm thick mixed with water proofing compound conforming to ISS at 2% by weight of cement used and the joints pointed neatly to full depth of tiles with the same cement mortar mixed with red oxide and water proofing compound including curing etc., complete complying with standard specification and as directed by the Engineer Incharge	Sqm	380	.0895911
9.0	Flooring with following ceramic tiles of size 305 x 305 x 6 mm laid over 20 mm thick cement mortar 1:3 (One Cement and Three Sand) base mortar over the existing slab / floor including cutting the tiles to the required size with special cutter wherever necessary, laying in position and pointing with white cement mixed with colouring pigment at the rate of 0.3 Kg. / sq.m. etc., complete complying with standard specification.	Sqm	70	.0132029
10.0	Dadoing the wall with best approved first quality ceramic tiles of size 300x450x8mm set in CM1:2,10mm thick & pointed with white cement mixed with colouring pigments at the rate of 0.40kgper sqm finishing neatly & curing in all floors etc. complete as per std specifications	Sqm	360	.0763882
11.0	Providing and Fixing of PVC Trims (Corner beeding) at the outer corner profiles of the tiles including cost of material, labour and handling etc. as directed by Engineer Incharge and as per standard specification.	Rm	150	.0031828
12.0	Paving the floor with best quality Vertified Tiles of size 600 x 600 x 8mm of approved colour, shade and quality laid in cement mortar 1:3 (one cement and three crushed stone sand) 20mm thick in all floors and the top pointed with the white cement mixed same colour pigments etc., complete complying with standard specification.	Sqm	142	.026783
13.0	Solid PVC door shutters using 19 Gauge 19mm MS square tubes for styles and outer frames. 15mm MS square tubes for top, lock and bottom rails. The steel tubes shall be covered with 5mm thick solid PVC sheets. Shutter using 5mm thick solid PVC sheets for panelling shall rigidly fixed in position including necessary furniture and fittings. The over all size of styles shall be 50mm x 30mm. The over all size of top rail, Lock rail and bottom rail shall be 75mm x 30mm. The over all size of frames shall be 50mm x 45mm, with suitable rabate for housing the shutter.	Sqm	36	.008912

Part C : Bill of Quantities

Tender Specification for Renovation of BHEL Guest House at Ashok Nagar

at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
14.0	UPVC Ventilator Specification: Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Louvered Ventilators of from the profile the size of outer frame 60mm x 58mm and shutter profile size of 60 x 78mm both profiles are reinforced with GI/1mm 125GSM and 100% corrosion free, the profile are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with all over the edges of frame and shutter. The corners and joints should be welded and cleaned. Radiations pin headed glass 4mm thick should be provided in the louvers. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames.	Sqm	10	.0047153
15.0	UPVC Window Specification: Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Windows of casement type (open) from the profile the size of outer frame 60mm x 58mm and shutter profile are reinforcement with GI/1mm 125GSM and 100% corrosion free, the profiles are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with over all the edges of frame and shutter the shutter will be provided with Espag multi power point locks and also it operates as handle. The corners and joints should be welded and cleaned. Radiations free pin headed plain or brown colour glass 4mm thick should be provided to the shutter.	Sqm	4	.0016975
16.0	Manufacturing supplying and fixing mosquito Fly proof mesh in a required shape and size fitting over the aluminium frame of powder coated size 2.5 inch x 1.5 inch with metal screw size of 2 inch drilled over this aluminium frame and aluminium powder coated door frame of size 3/4 x 1/2 of equal leaves shudders fitted in the exsisting window and fitted with inches and handles for door opening and locking system as directed by Engineer Incharge.	Sqm	10	.0007073
17.0	Supplying and fixing of MS grill of approved desgin for grill gate grill works to doors and windows opening ramp etc using necessary mild steel for inner and outer members which should be fixed on edges including priming coat of best approved quality red oxide primer etc.complete	Kg	110	.0017506
18.0	Cement Concrete 1:5:10 (One Cement, Five crushed stone sand and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for foundation including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification	Cum	3	.0023518

Part C : Bill of Quantities

Tender Specification for Renovation of BHEL Guest House at Ashok Nagar

at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
19.0	Supplying and erecting centering for sides and soffits including necessary supports and strutting upto 3.29 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at abote 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specificalton. (Payment for centering shall be given after the concrete is laid)	--		
a	For plane surfaces such as RCC floor slab, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and beams, etc.	Sqm	52	.0153248
20.0	Cement Concrete 1:2:4 (One Cement, Two crushed stone sand and Four hard broken stone jelly) using 20 mm gauge hard broken granite stone jelly for all RCC items of works excluding cost of reinforcement grill and fabricating charges, centering and shuttering but including laying, vibrating with mechanical vibrators, finishing, curing, etc. and providing fixtures like fan clamps in the RCC floor / roof slabs wherever necessary and bearing surfaces of walls, beams etc. shall be finished smooth with Cement Mortar 1:3 (One Cement and Three Sand) and kraft paper laid over it without claiming extra, etc., complete complying with standard specification and as directed by the Engineer Incharge	--		
a	Foundation & Basement	Cum	0.7	.0006601
b	Ground Floor	Cum	7	.0061889
c	First Floor	Cum	0.1	.0000943
21.0	Supplying, fabricating and placing in position Mild Steel / Ribbed Tor Steel grills for all RCC works as per design given including cost of steel and G.I. binding wire in all floors etc. complete complying with standard specification. (Contractor has to make his own arrangements for the supply of steel and binding wire)	MT	1.87	.0253507
22.0	Brick work in following Cement Mortar using best quality II class Ground moulded chamber burnt bricks of in Cement Mortar 1:5 including curing, etc., complete complying with standard specifiction.	Cum	17	.0120241

Part C : Bill of Quantities

**Tender Specification for Renovation of BHEL Guest House at Ashok Nagar
at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100**

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
23.0	Plastering with Cement Mortar 1:5 (One cement and Five sand), 12mm thick in all floors including curing etc. complete complying with standard specification and as directed by the Engineer Incharge.	Sqm	156	.0064364
24.0	Special ceiling plastering and finishing the exposed surface of all RCC items of work such as slabs, beams, sunshades, facia, canopy slab, staircase waist slab, landing slab etc., with Cement Mortar 1:3 (One Cement and Three Sand) 10mm thick including hacking the surfaces, providing cement mortar nosing, beading for sunshades, staircases, steps, landing slabs and curing, etc., in all floors complying with standard specification and as directed by the Engineer Incharge	Sqm	28	.0016504
25.0	Supplying and laying of Interlocking Paver Block Stone 60mm thk. Over a base layer of crushed stone sandfilling incl. Cost of materials laying and Labour charges etc.,	Sqm	100	.0194507
26.0	Painting two coats of wall surface with ready mixed Interior plastic emulsion paint of first class quality and of approved colour including thorough scrapping, clean removal of dirt, and wherever required etc., complete complying with standard specification.	Sqm	2,660	.0595781
27.0	Painting two coats of wall surface with ready mixed Exterior plastic emulsion paint of first class quality and of approved colour including thorough scrapping, clean removal of dirt, and wherever required etc., complete complying with standard specification.	Sqm	2,400	.0480963
28.0	Painting iron works such as steel doors, windows, ventilators, window bars, balustrades etc., with two coats of best approved first quality and colour of synthetic enamel paint over one coat of red oxide priming coat in all floors including cost of priming coat etc., complete complying with standard specification.	Sqm	90	.0021219
29.0	Painting wood work with two finishing coats of synthetic enamel ready mixed paint of approved quality and colour over one coat priming coat in all floors including the cost of primer etc., complete complying with standard specification.	Sqm	162	.0034375
30.0	Supplying and fixing in position first quality and approved PVC Water tank 10000Ltr complete complying with standard specifications.	Nos	1	.0135565

Part C : Bill of Quantities

Tender Specification for Renovation of BHEL Guest House at Ashok Nagar

at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
31.0	Supplying and fixing in position best quality and approved make Indian made white / colour glazed earthenware wash hand basin of size 550 x 400mm (with pedestal / without pedestal) with a pair of cast iron brackets, including cost 15mm dia brass CP pillar tap, 32mm dia 'B' class GI waste pipe with rubber plug and chain, 15mm dia GM wheel valve, 15mm brass nipple, 15mm dia nylon connection, 32mm dia CP brass waste coupling including fixing of wash basin using CI brackets on to the wall in position with TW plugs and screws, rubber washers, white lead and giving necessary water supply connection and painting the brackets with two coat of painting over a priming coat of anti-corrosive paint including testing for leakages etc., complete complying with standard specification and as directed by the Engineer Incharge.	Nos	29	.0188023
32.0	Supplying and fixing in position white / colour glazed European Water Closet of best quality and approved make with 100 mm 'P' or 'S' trap connecting with CI pipe of 100mm dia / PVC pipe of 110mm dia, double flapped rigid PVC black seat and seat cover with CP brass hinges including cost of white cement, cement for packing, spun yarn, teak wood plugs, brass screws, etc., including supplying and fixing 10 litres capacity PVC / 12.5 litres capacity porcelin low level flushing tank with a pair of CI brackets, etc., complete with all fittings such as 15mm brass ball valve with polythene float with brass handle, union, coupling connected by means of 40mm white PVC flush hand using Indian adopter joint including all internal fittings, etc.	Nos	3	.0053047
33.0	Supplying and fixing in position white / colour Wall Mounted Closet of best quality and approved make with 100 mm 'P' or 'S' trap connecting with CI pipe of 100mm dia / PVC pipe of 110mm dia, double flapped rigid PVC black seat and seat cover with CP brass hinges including cost of white cement, cement for packing, spun yarn, teak wood plugs, brass screws, etc., including supplying and fixing 10 litres capacity PVC / 12.5 litres capacity porcelin low level flushing tank with a pair of CI brackets, etc., complete with all fittings such as 15mm brass ball valve with polythene float with brass handle, union, coupling connected by means of 40mm white PVC flush hand using Indian adopter joint including all internal fittings, etc.	Nos	15	.029176

Part C : Bill of Quantities				
Tender Specification for Renovation of BHEL Guest House at Ashok Nagar at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100				
Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
34.0	Supplying and fixing in position white / colour Floor Mounted Closet of best quality and approved make with 100 mm 'P' or 'S' trap connecting with CI pipe of 100mm dia / PVC pipe of 110mm dia, double flapped rigid PVC black seat and seat cover with CP brass hinges including cost of white cement, cement for packing, spun yarn, teak wood plugs, brass screws, etc., including supplying and fixing 10 litres capacity PVC / 12.5 litres capacity porcelin low level flushing tank with a pair of CI brackets, etc., complete with all fittings such as 15mm brass ball valve with polythene float with brass handle, union, coupling connected by means of 40mm white PVC flush hand using Indian adopter joint including all internal fittings, etc.	Nos	2	.0035365
35.0	Supplying and fixing in position best quality PVC soil / waste pipes of various dia having 6 kg / sq.cm. pressure BIS mark and providing leak proof joints using PVC adhesives including fixing to the wall with special PVC / MS clamp, teak wood plugs, brass screws, etc., and making connection to all sanitary fittings, dismantling masonry / RCC works wherever found necessary and making the good dismantled portion to the original condition, including testing for any leakages, etc., complete complying with standard specifications. The rate for earth work excavation will be measured and paid separately in the cases where the pipe lines are proposed to laid below ground level	--		
a	75mm dia PVC Pipe	Nos	102	.0144289
b	110mm dia PVC Pipe	Nos	102	.0180361
36.0	Supplying and fixing in position PVC specials of the following dia and types of approved quality confirming to BIS and providing leak proof joints including fixing to the walls and giving connection to the PVC soil stacks, dismantling the masonry or RCC works and re-doing the dismantled portion to original condition etc., complete complying with standard specifications.	--		
a	75mm dia PVC Elbow	Nos	12	.0002829
b	75mm dia PVC Door Elbow	Nos	20	.0004715
c	110mm dia PVC Elbow	Nos	10	.0003536

Part C : Bill of Quantities				
Tender Specification for Renovation of BHEL Guest House at Ashok Nagar at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai- 600100				
Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
d	110mm dia PVC Door Elbow	Nos	20	.0007073
37.0	Supplying, laying and jointing UPVC pipes (having working pressure 10 kg. / sq.cm) of approved quality and best variety conforming to BIS of the following dia including cutting, threading and fixing UPVC specials using UPVC adhesives (but excluding cost of such specials) and fixing into wall with teak wood plugs, PVC clamps and screws making holes on the wall (or) drilling holes in the roof and making good the dismantled portion to original condition with necessary brick work / cement concrete and plastering neatly wherever necessary with necessary scaffolding charges upto 4 metre height above ground level, etc., complete complying with standard specifications.	--		
a	25mm dia UPVC Pipe	Rm	150	.0031828
b	40mm dia UPVC Pipe	Rm	120	.0038194
38.0	Supplying UPVC Specials (with working pressure 10 kg. / sq.cm.) in water supply arrangements (both in internal and external water supply arrangements)	--		
a	25mm dia UPVC Coupler	Nos	30	.0005305
b	25mm dia UPVC Elbow	Nos	50	.0008841
c	25mm dia UPVC Tee	Nos	12	.0002476
d	40mm dia UPVC Coupler	Nos	25	.0007368
e	40mm dia UPVC Elbow	Nos	12	.0003536
f	40mm dia UPVC Tee	Nos	8	.0002641
39.0	Plain Cement Concrete 1:2:4 (one cement, two sand and four hard broken stone jelly) using 20mm jelly for wearing coat including laying, compacting, finishing and curing, etc., complete as per standard specificatins and as directed by the Engineer Incharge.	Cum	15	.0106095

Part C : Bill of Quantities				
Tender Specification for Renovation of BHEL Guest House at Ashok Nagar at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100				
Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
40.0	Supplying and fixing in position first quality and approved variety of Gun metal Gate Valve / Wheel Valve with BIS make of the following dia including cost of shellac, thread balls, etc., complete complying with standard specifications (for both internal and external water supply arrangements).	--		
a	25mm dia Gate Valve	Nos	34	.00501
b	40mm dia Gate Valve	Nos	6	.0011105
41.0	Supplying and fixing in position 15mm dia brass CP screw down tap / Pillar tap (heavy duty) of approved make conforming to BIS specifications and quality including cost of shellac, thread, etc., complete complying with standard specification and including cutting and threading wherever necessary.	Nos	35	.0061889
42.0	Supplying and fixing in position CP shower rose with CP stop cock arrangement of size 15mm dia inlet and 100mm outlet to the pipe line with necessary cutting, threading and jointing using shellac etc., complete complying with standard specification and as directed by the Engineer Incharge.	Nos	27	.0111399
43.0	Supplying and fixing in position Indian make bevelled edge mirror of approved quality and brand PVC / Fibre Glass framed 600 x 450 x 5.5mm thick mirror, shelf type with hard board backing of approved colour fixed with brass screws, rawl plug, etc., complete complying with standard specification.	Nos	38	.0053755
44.0	Supplying and fixing approved best quality brass CP towel rail 600mm long and 20mm dia with brackets of same materials including cost of teak wood plugs and CP screws, etc., complete complying with standard specifications.	Nos	44	.0077803
45.0	Supplying and fixing best approved best quality brass CP soap tray of size 150 x 150mm including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications.	Nos	27	.0015914
46.0	Supplying and fixing best approved best quality Wall Mixer including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications.	Nos	20	.014146

Part C : Bill of Quantities

**Tender Specification for Renovation of BHEL Guest House at Ashok Nagar
at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100**

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
47.0	Supplying and fixing best approved best quality Stainless Steel Health Faucet including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications.	Nos	27	.0031828
48.0	Supplying and fixing best approved best quality SS Heavy Duty Long Body Tap 15mm including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications.	Nos	27	.002228
49.0	Supplying and fixing best approved best quality CP Angle Cock Tap including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications.	Nos	85	.007014
50.0	Supplying and fixing best approved best quality Toilet Tissue Roll Holder including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications.	Nos	21	.0008664
51.0	Supplying and fixing position CI Nahani Trap / Floor Trap of the following sizes with best stainless steel gratings of approved brand and quality, fixed over a bed of brick jelly lime concrete 1:2:5 (One part of lime, two part of crushed stone sand and five part of 40mm gauge brick jelly) and finished with Cement Mortar 1:3 (One Cement, Three sand) including dismantling masonry works wherever found necessary and making good the dismantled portions to the original condition and giving connection to the CI / PVC pipes, etc., complete complying with standard specification.	Nos	71	.0041848
52.0	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.,	Kg	45	.0028914

Part C : Bill of Quantities

Tender Specification for Renovation of BHEL Guest House at Ashok Nagar

at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
53.0	MINERAL FIBRE BOARD.- Providing and fixing of Armstrong Dune/ Equivalent Microlook Mineral Fibre Ceiling Tiles in true horizontal level false ceiling grid of SILHOUTTE system manufacture by M/s.Armstrong world industries, US / UK using hot dipped galvanized steel section, exposed surface chemically cleaned capping prefinished in backed polyester paint main Tee of size 15 x 38 x 0.33mm at every 1200mm c/c max and rotary stitched cross tee of size 15 x 38 x 0.33mm at every 1200 c/c max and 15 x 22 x 0.457mm wall angle alround the wall to form grid size of 600mm x 600mm and suspending the grid using 2mm GI rod and 6mm Nylon Rawl plug at every 1200mm intervals at the main tee and laying Armstrong Prima Fine Fissured Microlook Mineral Fibre Acoustic Ceiling tiles of size 600mm x 600mm x 15mm over the formed grid, manufactured by M/s. Armstrong World Industries US / UK. The false ceiling has to be carried out to the shape lines and levels as given in the drawing. The rate to include all the above. The False ceiling is to be erected in any shape in levels as shown in drawing. No extra cost is payable for difference in shape and levels. The measurement will be taken in flat / horizontal / linear alignment.	Sqm	37	.0046159
54.0	Supply and Fixing flush doors (soild core) hardwood frame of size 100mm x 75mm Confirming to relevant IS Standard with flush shutter 32mm thick with internal lipping and manufactured in an approved make and approved by the Architect. The Flush Door will be resin bonded and formaldehyde, treated chemically against dampness, termite and other fungus. The rate to include cost of iron oxidised hinges 3nos 125mm long, Aluminium anodised tower bolt 3nos and 1 no door lock, etc. The internal surfaces should be painted with synthetic enamel paint of approved shade and other side is finished with 1mm thick laminate of approved shade and make as directed by the Engineer-in-charge.	Sqm	21	.0214196
55.0	WIRING INSIDE ROOM	--		
a	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable as earth wire in exisiting surface/recessed steel/PVC conduit inlcuding dismantling as required. (One Point one way) - (length upto 5 mtrs)	Nos.	95	.0056362

Part C : Bill of Quantities

Tender Specification for Renovation of BHEL Guest House at Ashok Nagar

at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
b	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/recessed steel/PVC conduit including dismantling as required. (One Point one way) - (length upto 10 mtrs)	Nos.	50	.003292
c	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/recessed steel/PVC conduit including dismantling as required. (One Point one way) - (length upto 12 mtrs)	Nos.	30	.0027721
d	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/recessed medium class PVC Conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. (One Point one way) - (length upto 5 mtrs)	Nos.	10	.0010263
e	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/recessed medium class PVC Conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. (One Point one way) - (length upto 10 mtrs)	Nos.	10	.001199
f	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/recessed medium class PVC Conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. (One Point one way) - (length upto 15 mtrs)	Nos.	10	.0014935
g	Wiring for twin control light point with 1.5 sq.mm FRLS 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. FRLS PVC insulated copper conductor single core cable etc as required. (Two point two way for staircase)	Nos.	8	.0012048

Part C : Bill of Quantities				
Tender Specification for Renovation of BHEL Guest House at Ashok Nagar at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100				
Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
h	Supply and wiring for TV point with coaxian existing surface / recessed medium class PVC conduit with necessary accessories like T Junction, termination and removing existing coaxial cable.	Mtrs.	300	.0014285
56.0	CIRCUIT WIRING FOR AC/GEYER/REFRIGERATOR/OVEN/INDUCTION STOVE	--		
a	Wiring for AC/GEYER/REFRIGERATOR/OVEN/INDUCTION STOVE wiring alongwith earth wire with 2 X 6 sq. mm + 1 X 6 sq. mm of FRLS PVC insulated copper conductor, single core cable in surface/recessed medium class PVC conduit as required	Mtrs.	300	.0182638
b	Rewiring for AC/GEYER/REFRIGERATOR/OVEN/INDUCTION STOVE point with 2 X 6 sq. mm + 1 X 6 sq. mm of FRLS PVC insulated copper conductor, in exisiting surface/recessed steel/PVC conduit inlcuding dismantling existing conductor as required.	Mtrs.	750	.0456596
57.0	CIRCUIT WIRING FOR 5A POWER SOCKET	--		
a	Wiring for 5A Power socket along with earth wire with 2 X 2 sq. mm + 1 X 2 sq. mm of FRLS PVC insulated copper conductor in surface/recessed medium class PVC conduit as required	Mtrs.	750	.0286049
b	Rewiring for 5A Power socket along with earth wire with 2 X 2 sq. mm + 1 X 2 sq. mm of FRLS PVC insulated copper conductor in exisiting surface/recessed steel/PVC conduit inlcuding dismantling existing conductor as required.	Mtrs.	1,500	.0572098
58.0	MODULES	--		
a	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. (3 Module (100mmX75mm)) - for 5/6A & 15/16A switches & sockets	Nos.	75	.002535
b	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. (4 Module (125mmX75mm)) - 5/6A & 15/16A switches & sockets	Nos.	25	.0008862

Part C : Bill of Quantities

**Tender Specification for Renovation of BHEL Guest House at Ashok Nagar
at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100**

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
c	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. (6 Module (200mmX75mm)) - 5/6A & 15/16A switches & sockets	Nos.	90	.0037396
d	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. (8 Module (125mmX125mm)) 5/6A & 15/16A switches & sockets	Nos.	55	.0025808
59.0	SWITCHES	--		
a	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. (5/6 amps switch)	Nos.	500	.0023046
b	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. (15/16 amp switch)	Nos.	30	.000301
c	Supplying and fixing following modular bell push switch on the existing modular plate & switch box including connections but excluding modular plate etc. as required.	Nos.	15	.000126
d	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. (3 pin 5/6 amp socket outlet)	Nos.	230	.0019643
e	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. (6 pin 5/15 amp socket outlet)	Nos.	50	.0007117
f	Supplying and fixing following Telephone socket outlet modular type on the existing modular plate & switch box including connections but excluding modular plate etc. as required.	Nos.	20	.0001844
g	Supplying and fixing following TV socket outlet modular type on the existing modular plate & switch box including connections but excluding modular plate etc. as required.	Nos.	15	.0001383
h	Supplying and fixing of two module stepped type electronic fan regulator on the existing modular plate & switch box including connections but excluding modular plate etc. as required	Nos.	38	.0014493

Part C : Bill of Quantities

Tender Specification for Renovation of BHEL Guest House at Ashok Nagar

at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
i	Supplying and fixing of modular blanking plate on the existing modular plate & switch box including connections but excluding modular plate etc. as required	Nos.	50	.0002066
60.0	CONDUITS	--		
a	Supplying and fixing of 20 mm medium class PVC conduit along with accessories in recess including cutting the wall and making good the same in case of recessed conduit as required.	Mtrs.	100	.001323
b	Supplying and fixing of 25 mm medium class PVC conduit along with accessories in recess including cutting the wall and making good the same in case of recessed conduit as required.	Mtrs.	30	.0004496
c	Supplying and fixing of 32 mm medium class PVC conduit along with accessories in recess including cutting the wall and making good the same in case of recessed conduit as required.	Mtrs.	30	.0005704
61.0	LIGHT FIXTURES	--		
a	Supplying and installing of 220V, 36W ceiling surface mounted type LED luminaire of Bajaj make BZSSQL 36L LED WH GX MT or equivalent.	Nos.	6	.0056937
b	Supplying and installing of 220V, 24W ceiling surface mounted type LED luminaire of Bajaj make BPSLR Surface 24W LED WH RD SD or equivalent.	Nos.	5	.0010845
c	Supplying and installing of 220V, 18W wall/ceiling surface mounted type LED luminaire of Bajaj make BGSLO Sleek Surface 18W WH SQ LED or equivalent.	Nos.	7	.0015657
d	Supplying and installing of 220V, 4W wall mounted type LED luminaire of Havells make 1 N x 4 W T32 LED Filament Lamp or equivalent.	Nos.	15	.0101674
e	Supplying and installing of Decorative ultra slim polycarbonate LED lighting fixture of Havells make 1 N x LED Pride Plus NxT Batten 36 W 6500 K or equivalent.	Nos.	25	.0019115
f	Supplying and installing of wall mounted type LED light of Havells make 1 N x LED ADORE 23 W B22 CDL 3 STAR or equivalent (including base cap)	Nos.	15	.0010167
g	Supplying and installing of wall mounted type LED Mirror light of Havells make 1 N x Austra LED Batten 20 W 4000 K or equivalent	Nos.	15	.0011459

Part C : Bill of Quantities				
Tender Specification for Renovation of BHEL Guest House at Ashok Nagar at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100				
Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
62.0	CIRCUIT BREAKER	--		
a	Supplying 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.	Nos.	97	.0025665
b	Supplying and fixing 80A, Four pole, (Three phase and neutral), 415 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.	Nos.	3	.0008905
c	Supplying and fixing 20A, Two pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing modular plate complete with connections, testing and commissioning etc. as required for Split AC.	Nos.	15	.0031442
63.0	CLOSED CIRCUIT TELEVISION SYSTEM	--		
a	Supplying and installing Wall or ceiling mounted indoor type Fixed Dome IP Camera with 1/2.8 inch 2MP PS CMOS Image Sensor 2MP@25/30fps (1920 x 1080), IR Range of 30 Mtrs,. The items including necessary fixing accessories.	Nos	11	.0077803
b	Supplying and installing Wall mounted outdoor Bullet type IP Camera with with 1/3 inch 2MP PS CMOS Image Sensor 2MP @25/30fps (2560 x 1440), IR Range of 30 Mtrs, The items including junction box, front cover and all necessary fixing accessories.	Nos.	3	.0021926
c	Supply, fixing and termination of high quality rack mounted type patch panel with one number of 24 port POE network switch, fixing frames, links and interconnections, necessary accessories etc., all complete as per specifications, drawings and / or as directed by the Engineer.	Nos.	1	.0049216

Part C : Bill of Quantities				
Tender Specification for Renovation of BHEL Guest House at Ashok Nagar at BHEL PSSR, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai - 600100				
Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
d	Supplying and installing of 16 Channel Network Video Recorder with Max 320Mbps incoming bandwidth Smart H.265+/H.265/ Smart H.264+/H.264/MJPEG Up to 12MP resolution preview and playback Support 8 SATA HDDs up to 10TB Each, 4 USB (2 USB3.0, 2USB2.0) 2 HDMI / 2 VGA simultaneous video output Support Multi-brand network cameras Support RAID 0/1/5/10 Mobile Software: iCMOB, gCMOB CMS Software: KVMS Pro. The items including supply of 6TB hard disk, connectors, pins, Power Supply Unit and providing complete configuration etc.	Nos	1	.0151344
e	Supplying and installing of 43 inch LED colour monitor.	Nos	1	.0044183
f	Online UPS Power supply 2 KVA with external batteries of capacity 5000 VAH or above to give minimum 2 Hrs. backup for entire load (with battery stand), Input Voltage: 160 V to 270V AC, Output Voltage: 230 V AC +/-1% Single Phase, Sine Wave, 50 Hz Short circuit protection, Over load prot	Nos	1	.0096145
64.0	SUPPLY OF MISC ITEMS	--		
a	Supply and installation of call bell of reputed make	Nos.	3	.0000813
b	Supply and installation of 2HP motor starter box of reputed make	Nos.	2	.0006929
TOTAL Weightage				0.9999985